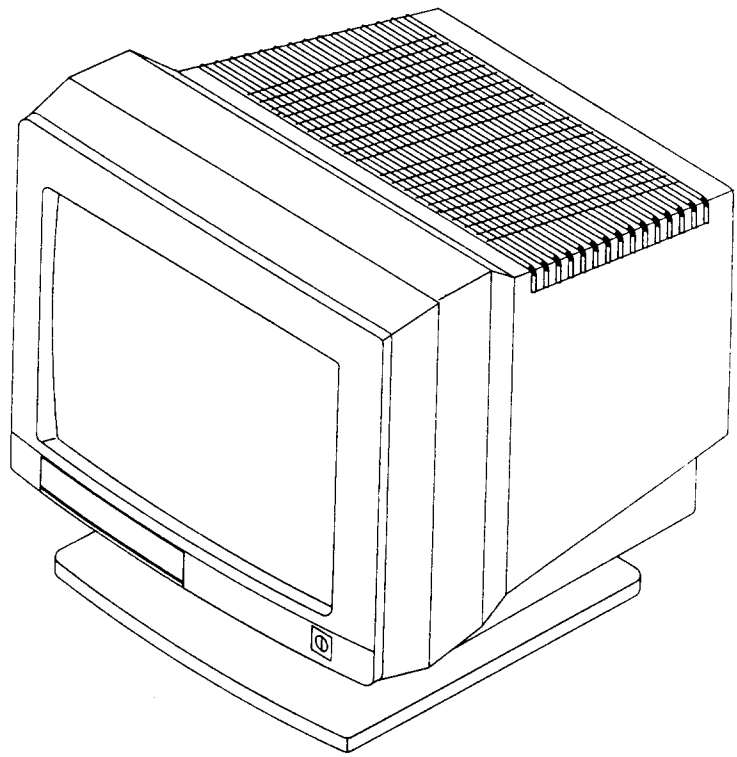
SERVICE MANUAL

CM-326

COLOR VIDEO MONITOR



M614

AOC

I. TTL INPUT SIGNAL

TIMING	A	B	C	D	E	F	G	H	H-SYNC POLARITY	V-SYNC POLARITY
CGA	63.49 us	44.56 us	51.24 us	4.46 us	16.63 ms	12.7 ms	14.29 ms	0.19 us	POSITIVE	POSITIVE
MDA	54.25 us	45.21 us	46.34 us	8.48 us	20.07 ms	18.99 ms	18.99 ms	0.868 ms	POSITIVE	NEGATIVE
EGA	45.78 us	39.38 us	39.38 us	3.94 us	16.66 ms	16.02 ms	16.02 ms	0.595 ms	POSITIVE	NEGATIVE

II. ANALOG INPUT SIGNAL

TIMING	A	B	C	D	E	F	G	H	H-SYNC POLARITY	V-SYNC POLARITY
VGA 350	31.79 us	25.43 us	22.06 us	3.81 us	14.27 ms	11.13 ms	12.46 ms	0.064 ms	POSITIVE	NEGATIVE
VGA 400	31.79 us	25.43 us	22.06 us	33.81 us	14.27 ms	12.17 ms	12.91 ms	0.064 ms	NEGATIVE	POSITIVE
VGA 480	31.79 us	25.43 us	22.06 us	3.81 us	16.69 ms	15.26 ms	15.35 ms	0.064 ms	NEGATIVE	NEGATIVE
8514A	28.17 us	22.89 us	23.06 us	3.87 us	11.51 ms	10.82 ms	10.82 ms	0.056 ms	POSITIVE	POSITIVE

5. CONTROLS

REAR: TTL/ANALOG SWITCH
FRONT: POWER SWITCH
CONTRAST CONTROL
BRIGHTNESS CONTROL
COLOR SWITCH
TEXT SWITCH
HORIZONTAL WIDTH SWITCH
PRESET SWITCH
HORIZONTAL POSITION CONTROL
VERTICAL POSITION CONTROL
VERTICAL SIZE CONTROL

1. POWER SWITCH
   Used to turn power ON or OFF, when the pwoer is ON, the power indicator is lit.

2. CONTRAST CONTROL
   Adjusts the display to the contrast preferred by the user.

3. BRIGHTNESS CONTROL
   Used to adjust the picture brightness of the screen.

4. H-PHASE CONTROL
   Adjustment for proper horizontal position of the display.

5. V-CENTER CONTROL
   Adjustment for proper vertical position of the display.

6. V-SIZE CONTROL
   Adjustment for proper vertical size of the display. The V-SIZE control works only if mode switch is OFF. Note: see #11.

7. COLOR SWITCH
   TEXT SWITCH is in the OFF position. The three color, (8/16/64) switch is necessary when using non-IBM compatible graphic adapters. Refer to instructions accompanying the graphics adapter being used for information on how many colors the adapter can display.

   When TEXT SWITCH is ON, the display will appear in one color (green, amber, white with blue background and normal white) determined by position of color control.

   NOTE: This switch should be set correctly in relation to the input signal of the graphic adapter being used. Refer to instructions accompanying the graphic adapter for information on the input signal.

8. TEXT SWITCH
   Refer to NO. 7.

   NOTE: The text switch and the color switch work only in the TTL signal input mode.

9. H-WIDTH SWITCH
   Used to change the horizontal display size.

   NOTE: This switch work only if the horizontal frequency is 15KHz to 20KHz.

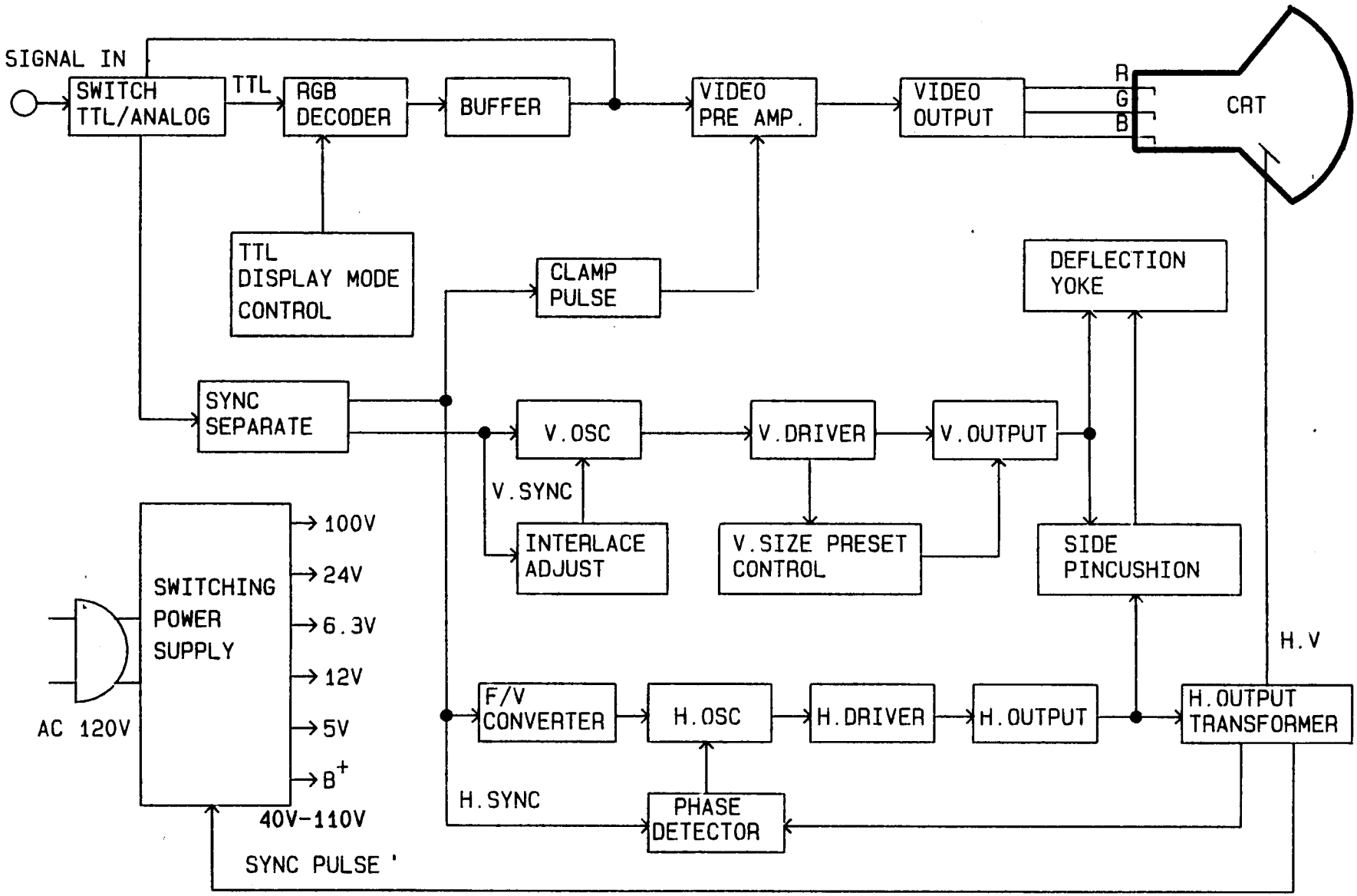
10. TTL/ANALOG SWITCH
--Position of switch is determind by input signal being used.

NOTE: It is important to determine whether the input signal of the graphics adapter is ANALOG or TTL, prior to connecting the adapter with your personal computer.

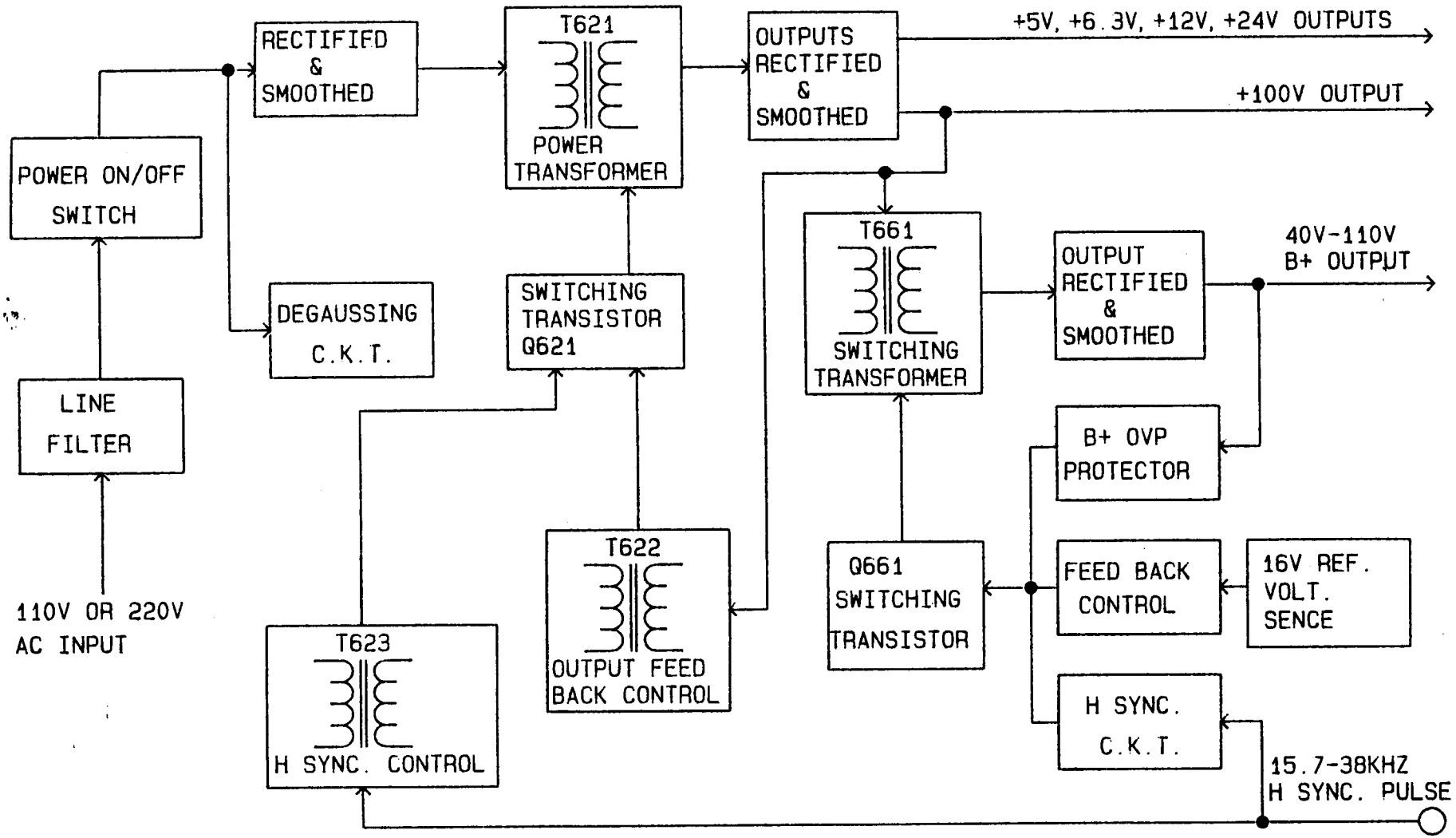
Refer to instructions accompanying the graphics adapter for information on the input signal.

11. MODE SWITCH
Used for IBM VGA, 8514A, EGA, CGA, MDA or other compatibal timing modes. The mode switch is used to fix the vertical display size to a preset size.

6-1 CM-326 BLOCK DIAGRAM



6-2 CM-326 SMPS BLOCK DIAGRAM



7. ADJUSTMENT

INTERNAL ADJUSTMENTS AND PRECAUTIONS

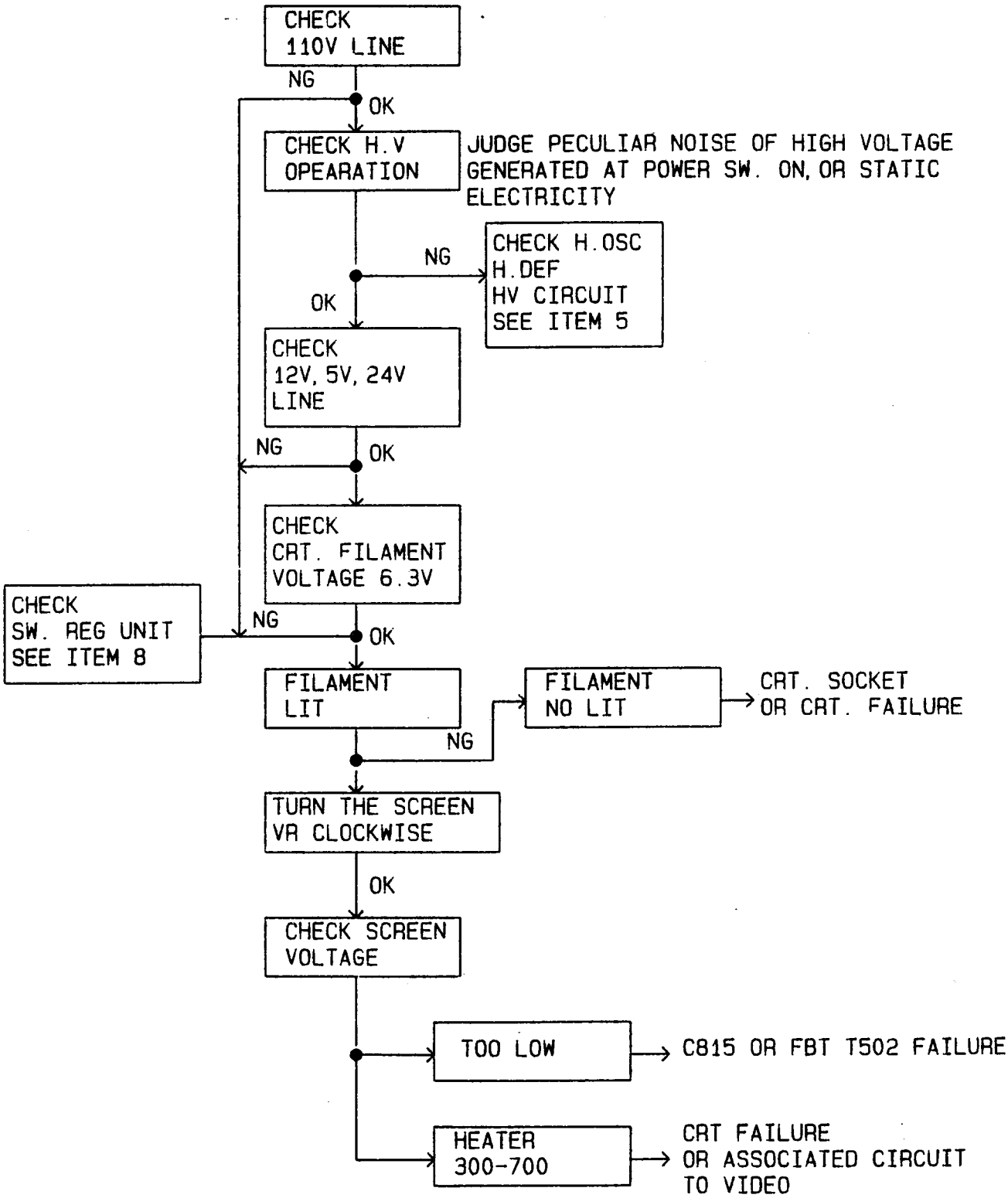
1. Internal adjustments should only be made by a qualified technician and set to factory specifications.
2. Approximately 30 minutes should be allowed for warm up before adjustment.

ADJUSTMENT ELEMENT

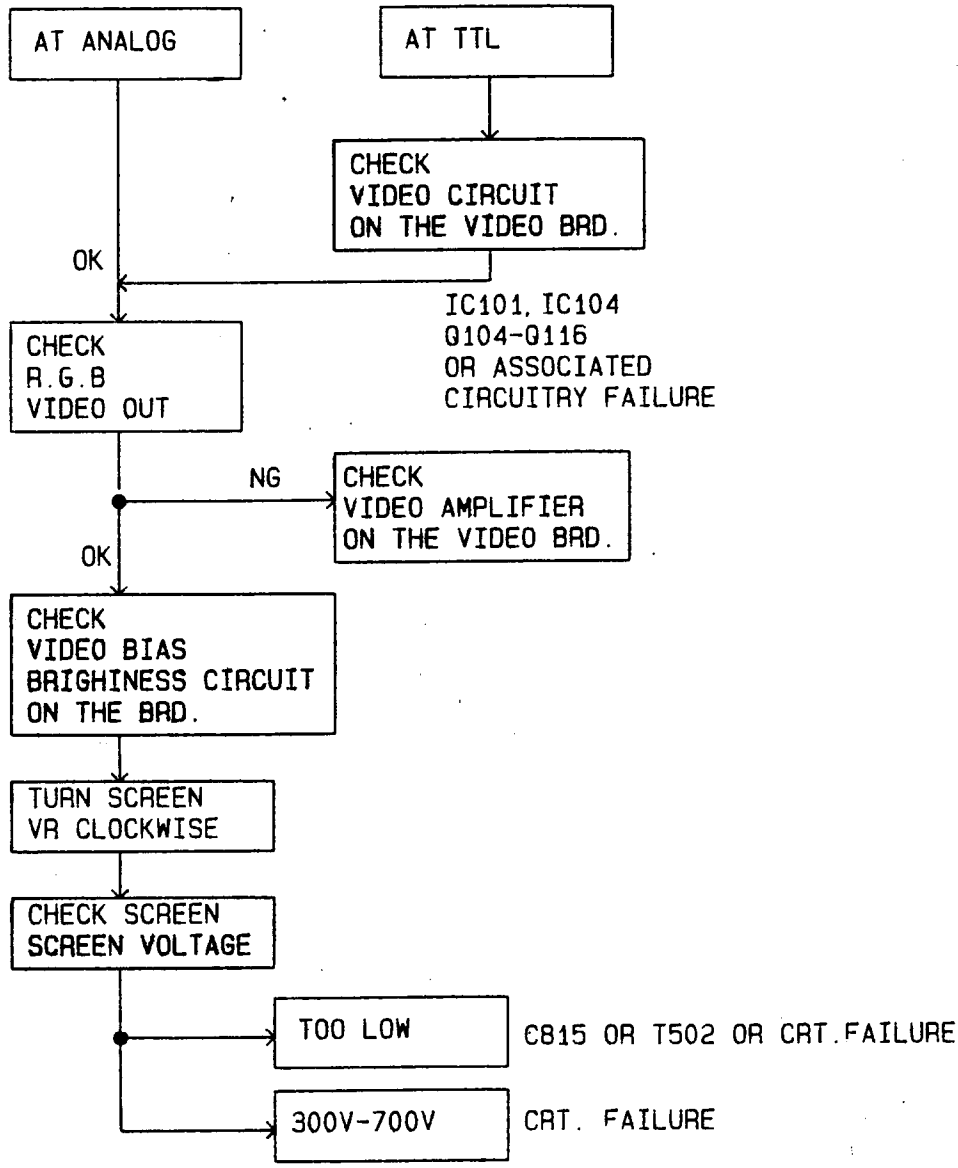
NO.	DESIGNATION	FUNCTION	LOCATION
1.	VR640	100VDC ADJ	MAIN BOARD
2.	VR551	16VDC ADJ	MAIN BOARD
3.	VR552	F/V ADJ	MAIN BOARD
4.	VR502, VR555	HOR. HOLD ADJ	MAIN BOARD
5.	VR670	HIGH VOLTAGE ADJ	MAIN BOARD
6.	VR2003	H.V. PROTECT	MAIN BOARD
7.	VR401	VERT. LINEARITY	MAIN BOARD
8.	L505	HOR. WIDTH	MAIN BOARD
9.	VR402	V-SIZE	MAIN BOARD
10.	VR404, VR406	HOR. PINCUSHION	MAIN BOARD
11.	VR501, VR553, VR554	SUB HOR. POSITION	MAIN BOARD
12.	VR711, VR712, VR713	RRESET VERT. SIZE	SIGNAL BOARD
13.	VR714, VR715, VR716	PRESET VERT. SIZE	SIGNAL BOARD
14.	VR717, VR718	PRESET VERT. SIZE	SIGNAL BOARD
15.	VR704	INTERLACE ADJ	SIGNAL BOARD
16.	VR801, VR802, VR803	R,G,B, SUB BRIGHT.	CRT BOARD
17.	VR701, VR702, VR703	R,G,B, SUB CONTRAST	SIGNAL BOARD
18.	VR470	HOR. RASTER ADJ	MAIN BOARD

8. TROUBLE SHOOTING

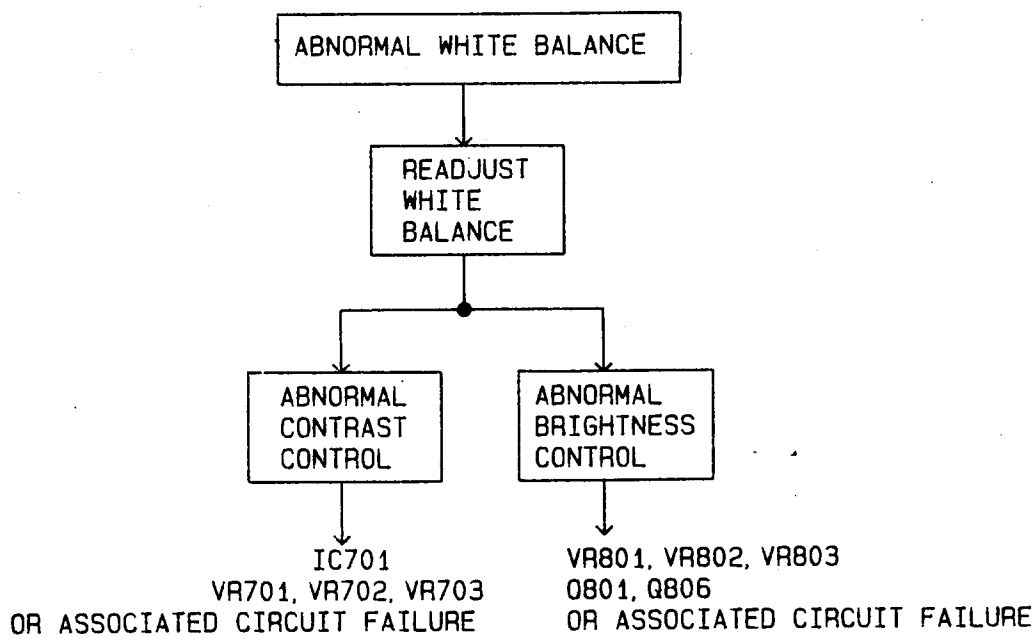
8-1 NO RASTER TROUBLE SHOOTING



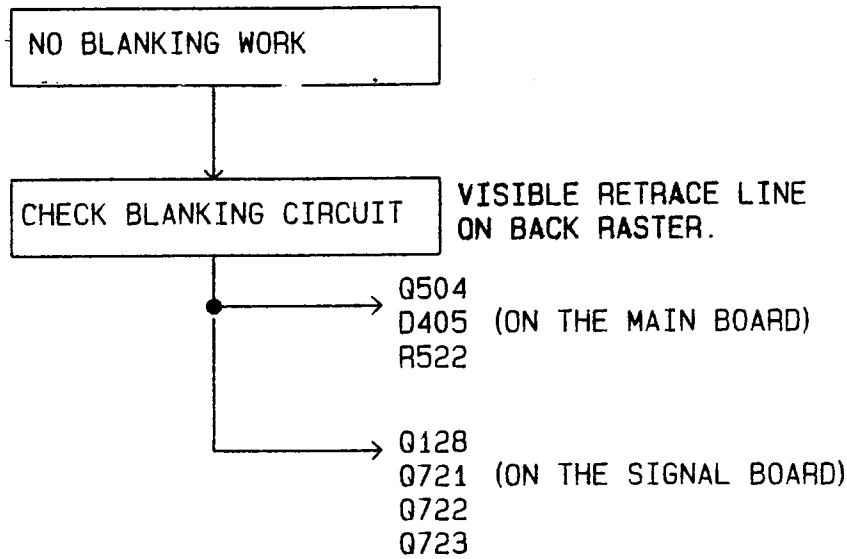
8-2 ABNORMAL VIDEO ON CRT SCREEN



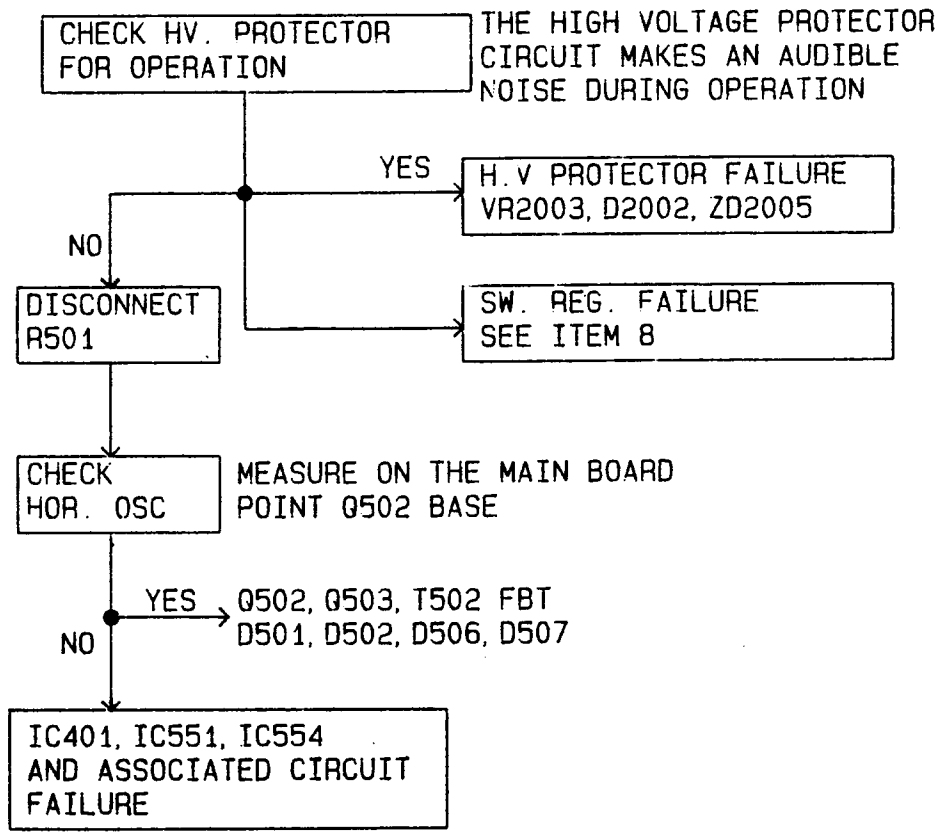
8-3 ABNORMAL WHITE BALANCE



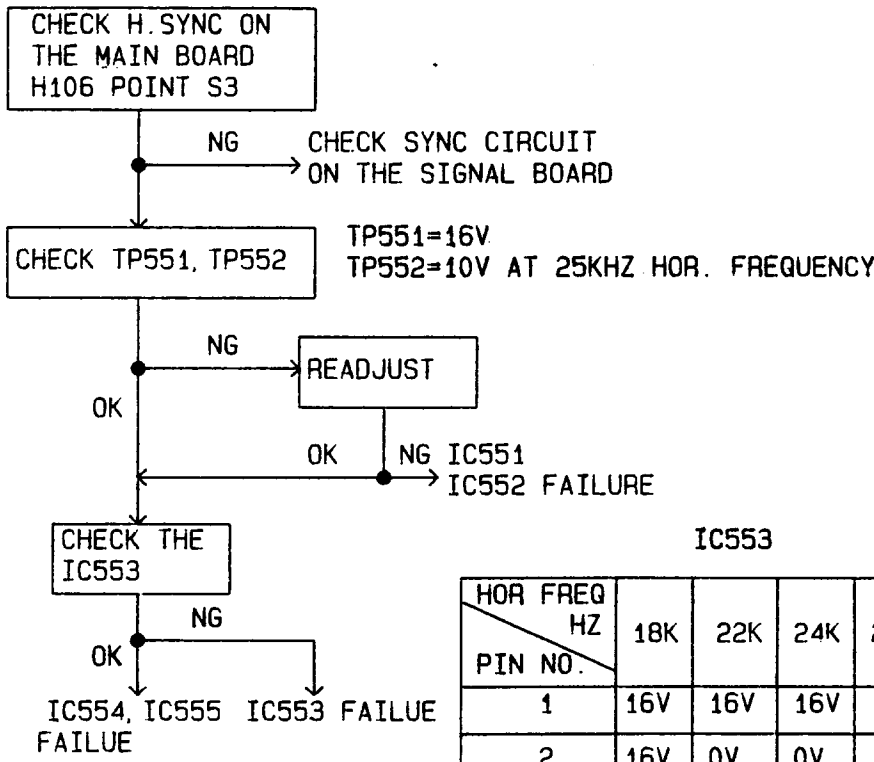
8-4 NO BLANKING WORK



8-5 H.OSC/DEF/HV CIRCUIT FAULT



8-6 F/V CONVERTER AND ASSOCIATED CIRCUIT

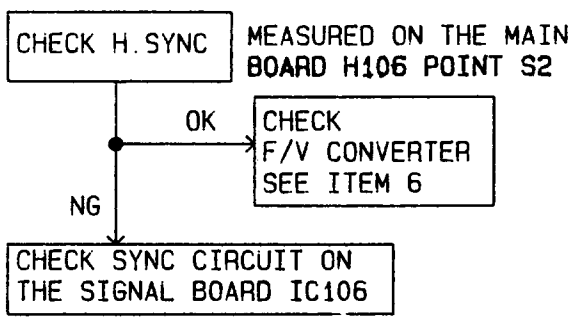


IC553

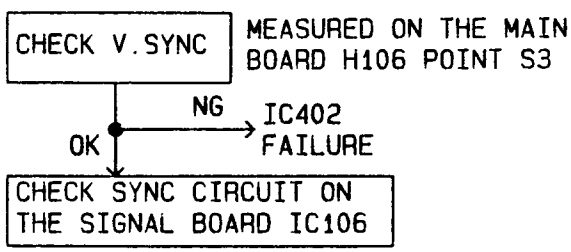
HOR FREQ HZ / PIN NO.	18K	22K	24K	28K	28K
1	16V	16V	16V	16V	0V
2	16V	0V	0V	0V	0V
13	0V	0V	0V	0V	16V
14	16V	16V	16V	16V	0V

8-7 UNSTABLE SYNCHRONIZATION

HORIZONTAL

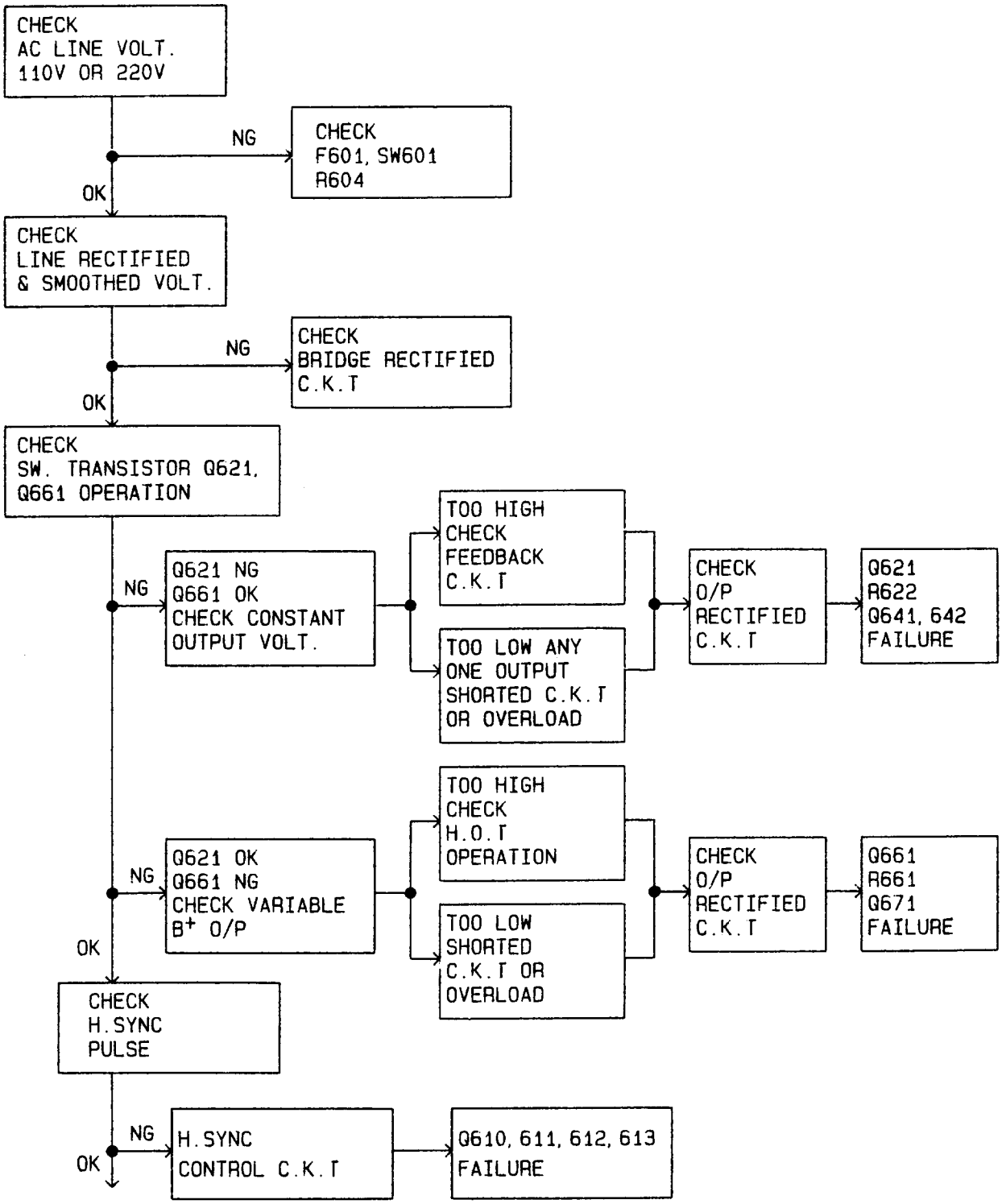

CHECK H.SYNC
MEASURED ON THE MAIN BOARD H106 POINT S2
OK
CHECK F/V CONVERTER SEE ITEM 6
NG
CHECK SYNC CIRCUIT ON THE SIGNAL BOARD IC106

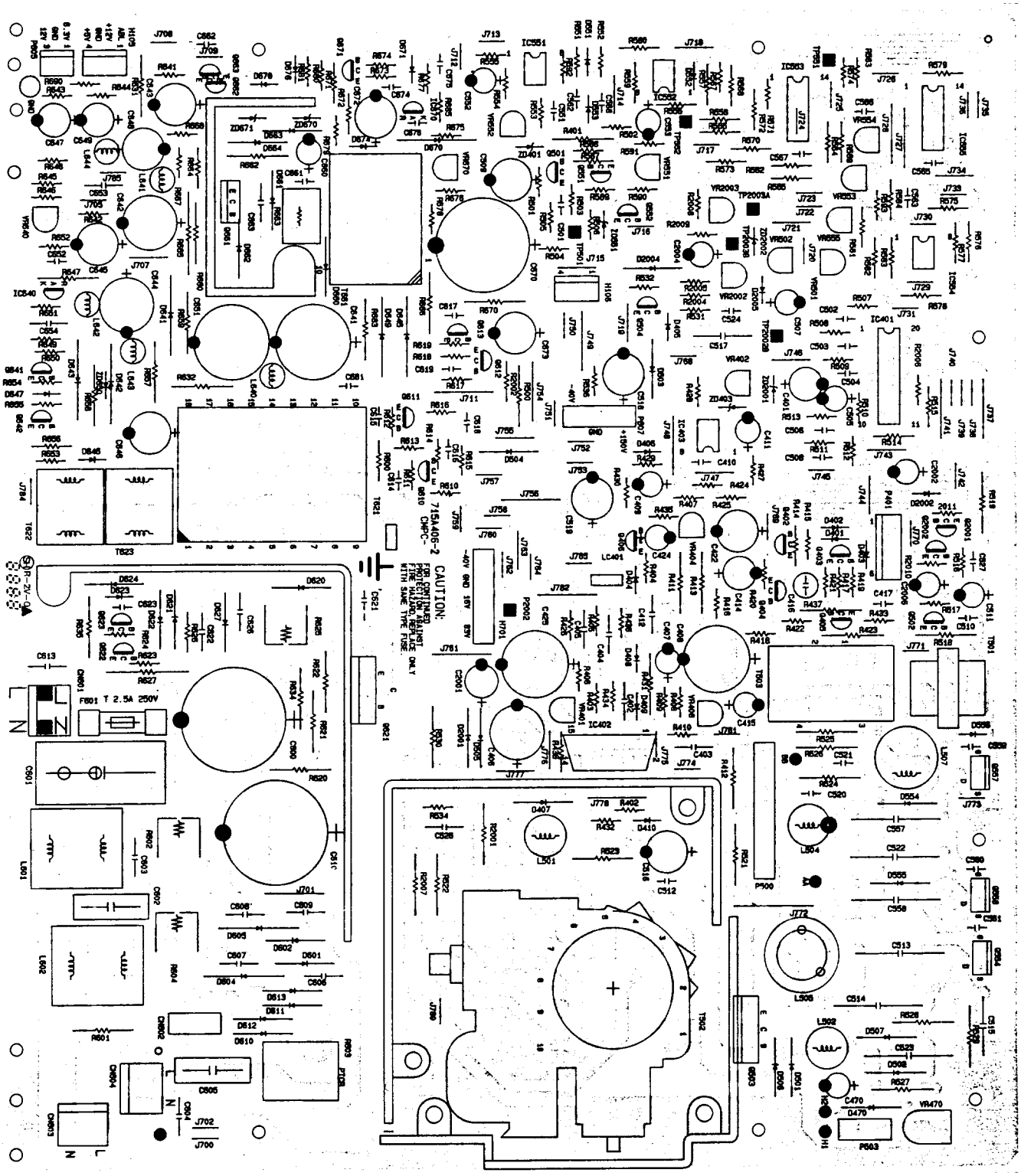
VERTICAL



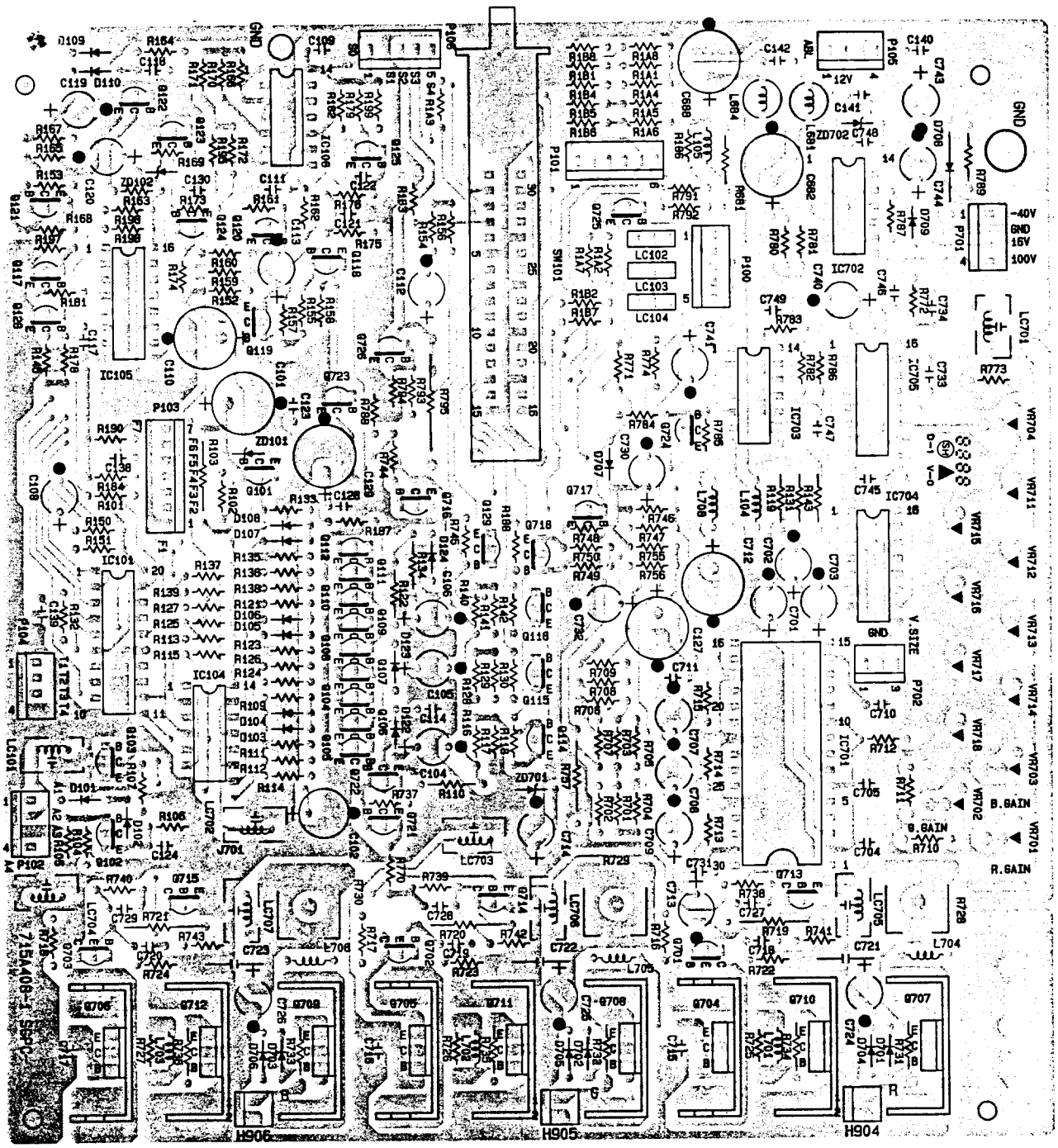
8-8 POWER SUPPLY TROUBLE SHOOTING CHART

1. BEFORE CHECK SW. REG. PLEASE REFER TO THE POWER SUPPLY BLOCK DIAGRAM
2. POWER SUPPLY OUTPUT. (A) VARIABLE OUTPUT: 48.5V-111.5V
   (DEPENDING UPON H.SYNC FREQUENCY)
   (B) CONSTANT OUTPUT: 5V, 6.3V, 12V, 24V, 100V
3. CHECKING FLOW CHART

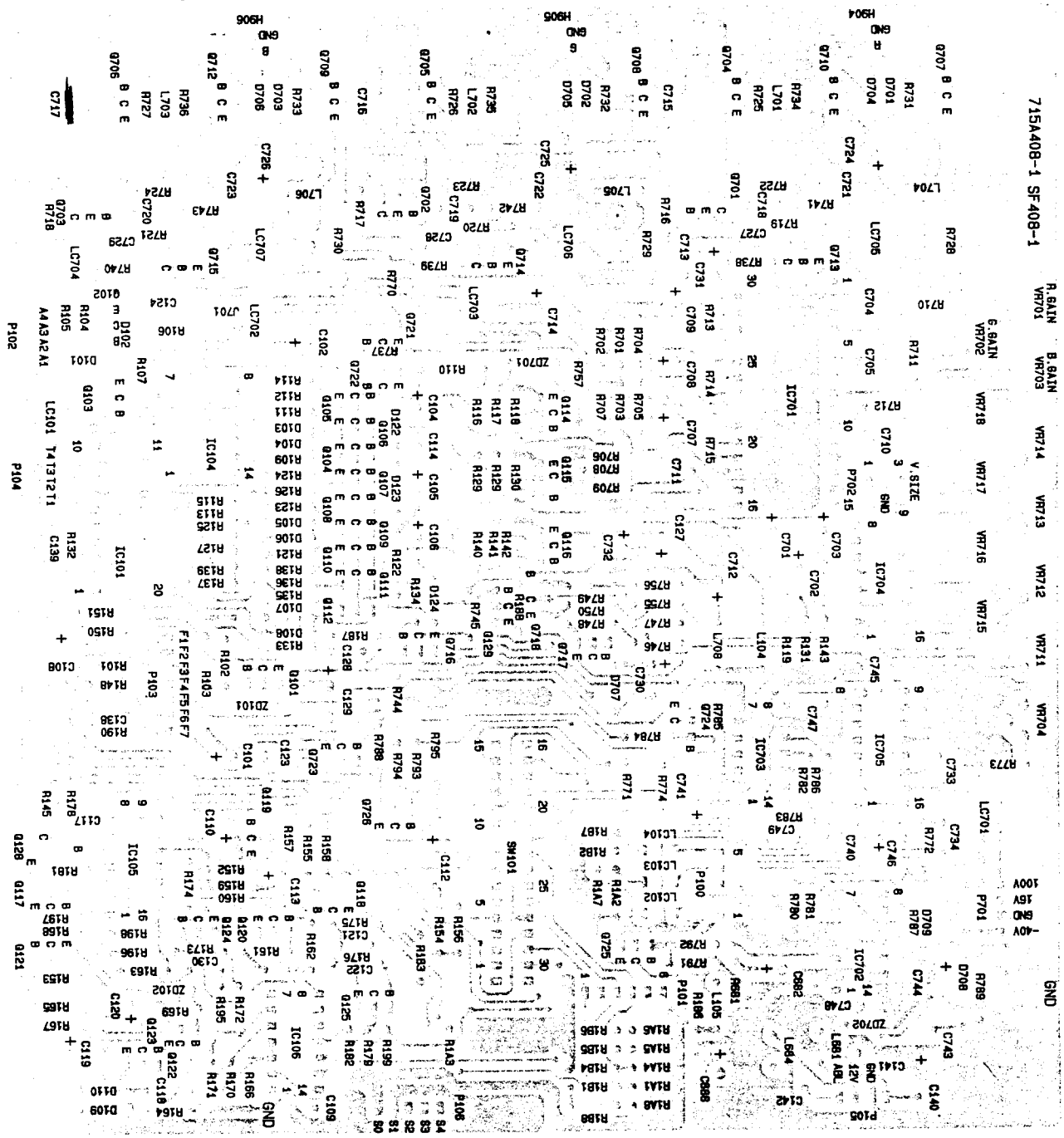




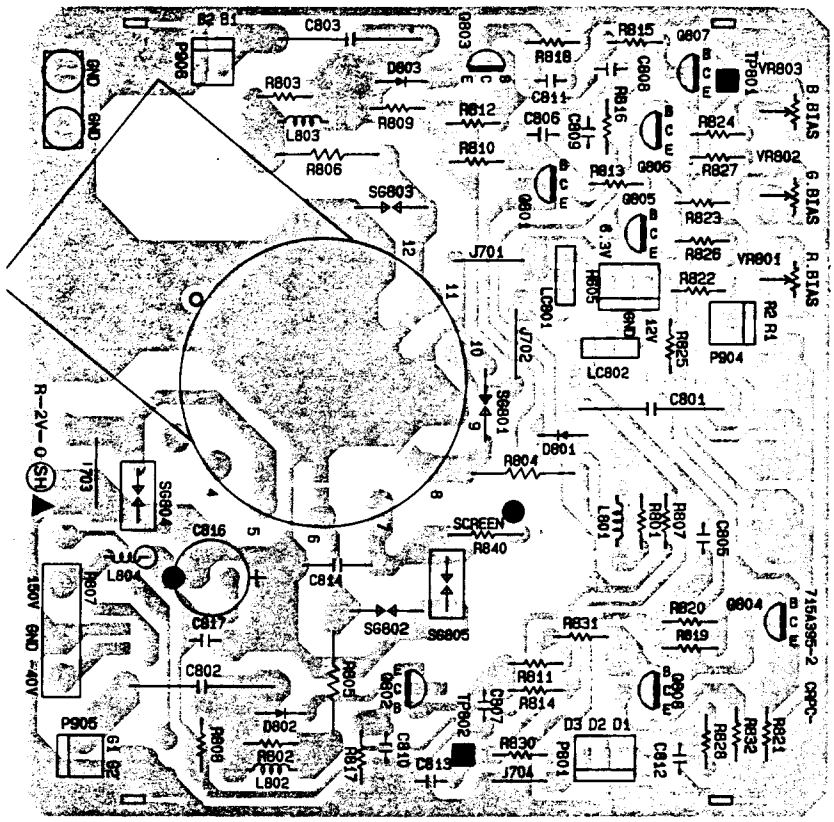
9–1 MAIN BOARD (CMPC–326xx)



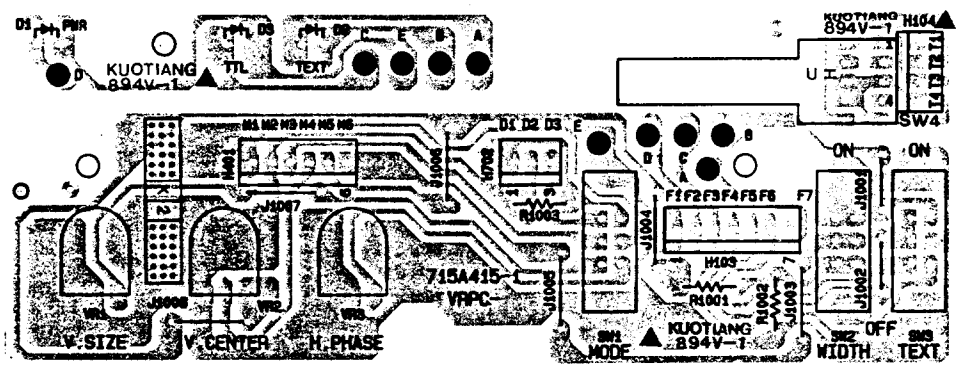
9–2 SIGNAL BOARD (SGPC–15x)



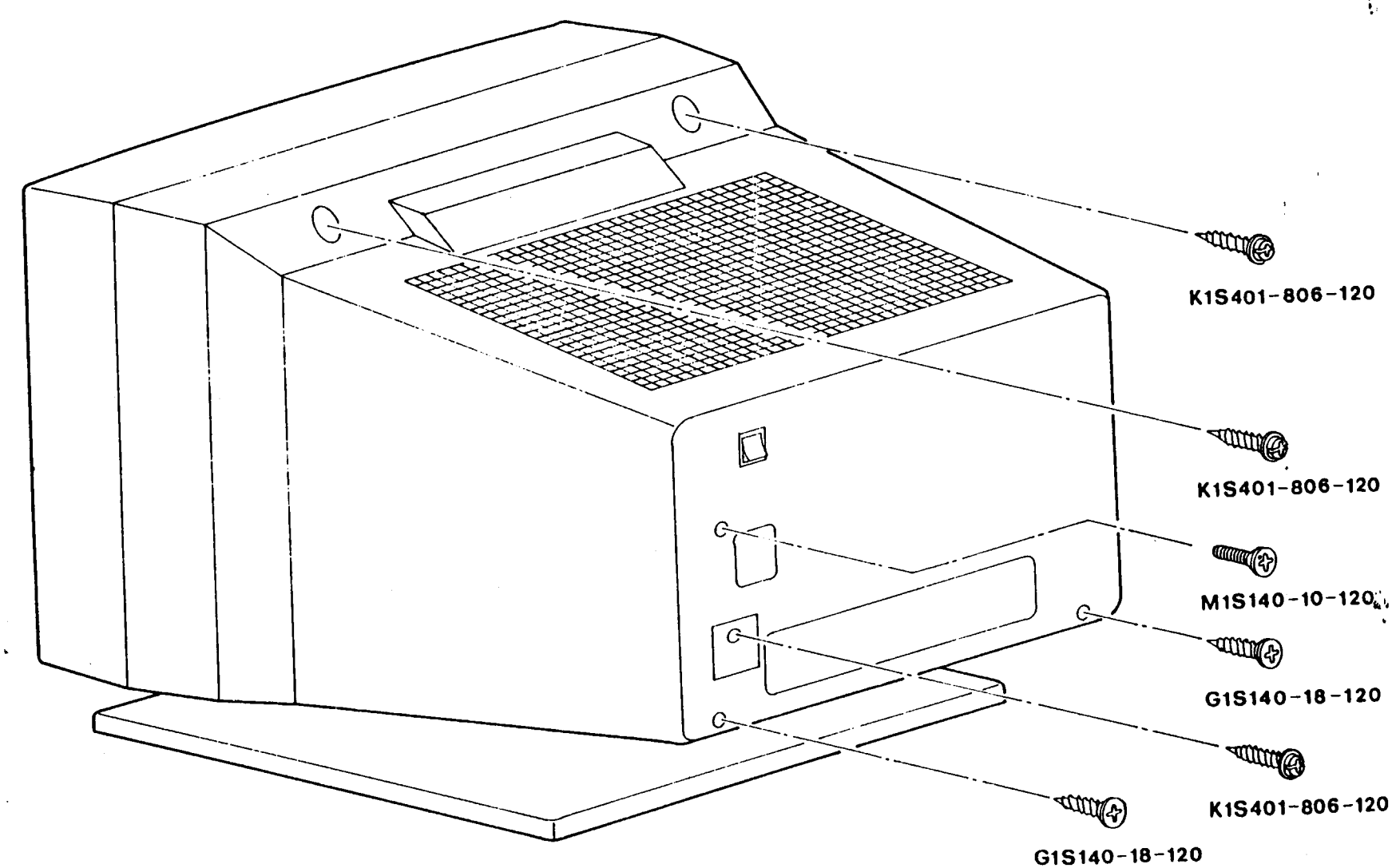
SIGNAL BOARD (SGPC–15x)



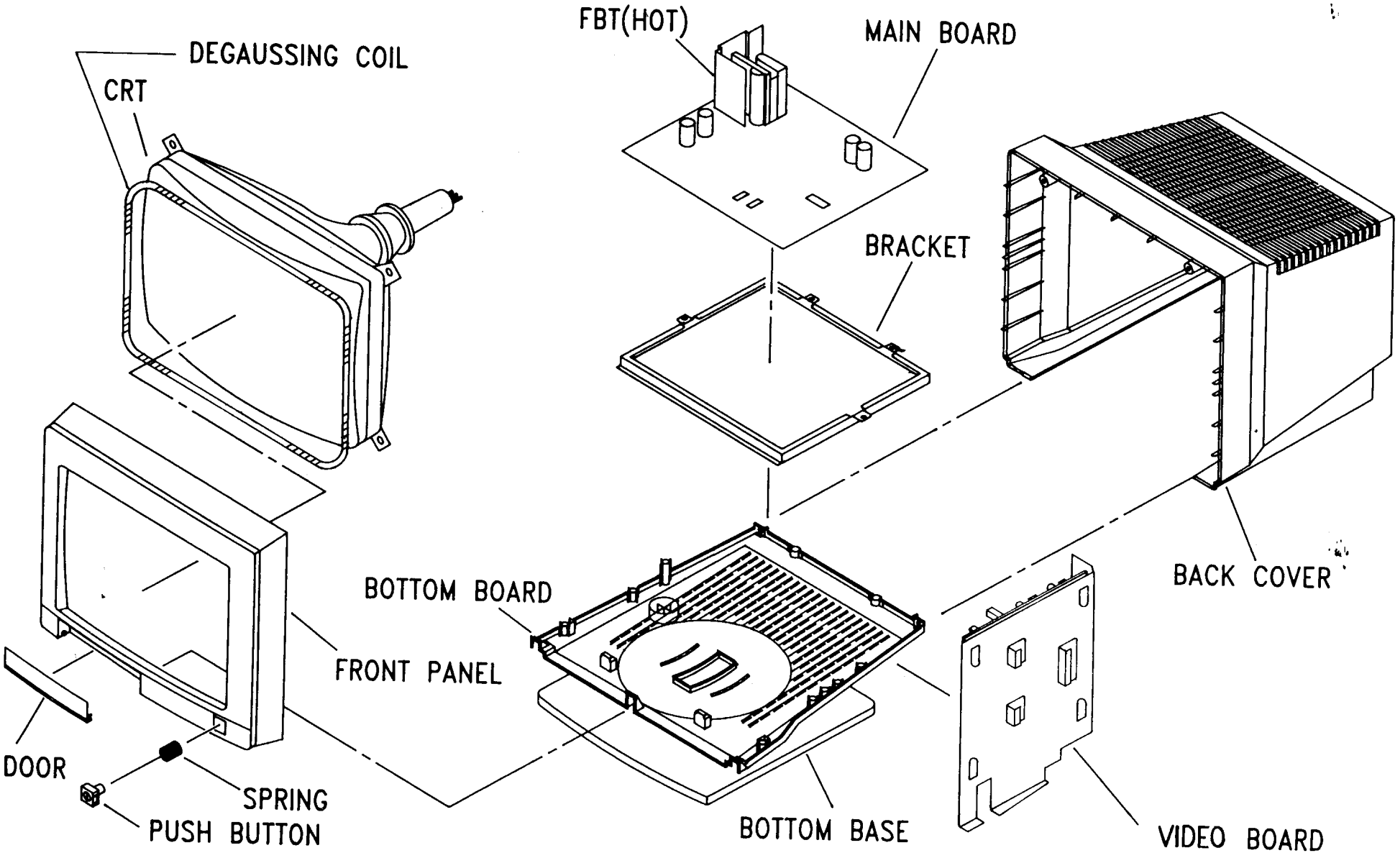
CRT BOARD



9–3 VR CONTROL BOARD



10. MECHANICAL DIS-ASSEMBLY



MECHANICAL OF CABINT FRONT DIS-ASSEMBLY

11. PARTS LISTING

PARTS LIST OF CABINET

APPL.	R326BSBAC (TUV/ZZF-IEC950)	R326BSDAC (TUV ONLY-IEC950)	R326BSFAC (FCC/UL)	R326BSUAC (CSA)	SPECIFICATION
	CMC-326B	CMC-326D	CMC-326F	CMC-326U	CHAS
	1T 421-4-128	1T 421-4-128	1T 421-4-128	1T 421-4-128	3X10
	1T 421-9-128	1T 421-9-128	1T 421-9-128	1T 421-9-128	4X11 STEEL
	1T 421-10-120	1T 421-10-120	1T 421-10-120	1T 421-10-120	SCREW
	2C 9-77-128	2C 9-77-128	2C 9-77-128	2C 9-77-128	STEEL
	2T 208-1-47	2T 208-1-47	2T 208-1-47	2T 208-1-47	TERNEPLATE
	3C 1-115-47	3C 1-115-47	3C 1-115-47	3C 1-115-47	6.2X20.8X2.3
	4C 1-97-128	4C 1-97-128	4C 1-97-128	4C 1-97-128	STEEL
	12T 325-2-	12T 325-2-	12T 325-2-	12T 325-2-	RUBBER
	13T 3042-1-	13T 3042-1-	13T 3042-1-	13T 3042-1-	DOOR LATCH
	15T 5358-1-		15T 5358-1-	15T 5358-1-	ALUMINUM
	15T 5445-2-	15T 5445-2-	15T 5445-2-	15T 5445-2-	TERNEPLATE
	15T 5465-1	15T 5465-1	15T 5465-1	15T 5465-1	TERNEPLATE
	15T 5466-1	15T 5466-1-	15T 5466-1-	15T 5466-1-	TERNEPLATE
	19B 403-5-	19B 403-5-	19B 403-5-	19B 403-5-	STEEL
	19T 531-1-	19T 531-1-	19T 531-1-	19T 531-1-	STEEL
	23T 3152-3-	23T 3152-3-	23T 3152-3-	23T 3152-3-	PVC
	26A 800-4-1	26A 800-4-1	26A 800-4-1	26A 800-4-1	BAR CODE (PINK)
	33T 3292-5-	33T 3292-5-	33T 3292-5-	33T 3292-5-	DETENT ARM
	33T 3292-6-	33T 3292-6-	33T 3292-6-	33T 3292-6-	DETENT ARM
	33T 3421-1-	33T 3421-1-			ABS PLASTIC
	33T 3475-1-	33T 3475-1-	33T 3475-1-	33T 3475-1-	A.B.S. PLASTIC
	33T 3477-1-	33T 3477-1-	33T 3477-1-	33T 3477-1-	A.B.S. PLASTIC
	33T 3478-1	33T 3478-1	33T 3478-1	33T 3478-1	A.B.S. PLASTIC
	33T 3479-5-		33T 3479-5-		A.B.S. PLASTIC
		33T 3479-11-		33T 3479-11-	A.B.S. PLASTIC
	33T 3480-1-	33T 3480-1-	33T 3480-1-	33T 3480-1-	A.B.S. PLASTIC
	33T 3486-1-	33T 3486-1-	33T 3486-1-	33T 3486-1-	A.B.S. PLASTIC
	34E 436-7-A	34E 436-7-A	34E 436-7-A	34E 436-7-A	A.B.S. PLASTIC
		34E 482-4-A		34E 482-4-A	A.B.S. PLASTIC
	34E 482-8-A		34E 482-8-A		A.B.S. PLASTIC
		34E 483-6-A		34E 483-6-A	A.B.S. PLASTIC
	34E 483-12-A		34E 483-12-A		A.B.S. PLASTIC
		34E 484-2-A		34E 484-2-A	A.B.S. PLASTIC
	34E 484-4-A		34E 484-4-A		A.B.S. PLASTIC
				40A 153-3-	13" DHHS WARNING LBL
				40A 153-46-	WARNING LABEL
	40A 153-48-	40A 153-48-	40A 153-48-	40A 153-48-	CRT WARNING LABEL
	40A 154-14-	40A 154-14-	40A 154-14-	40A 154-14-	CABT LABEL
			40A 155-104-		5X2.3
				40A 155-340-1	LABEL
			40A 155-341-1		LABEL
	40A 155-349-	40A 155-349-			ID LABEL
				40A 575-17-	CSA LABEL
			40A 575-29-		LABEL
	40A 575-30-	40A 575-30-			28KV WARING LABEL
	40A 575-36-	40A 575-36-			TUV LABEL
			40A 581-192-		WARNING LABEL
	40A 590-52-				FTZ LABEL
			41A 68-36-		WARRANTY STATEMENT
	41A 68-60-				FTZ STATEMENT
			41A 70-7-3		15.5X10.7
	41A 401-419-	41A 401-419-	41A 401-419-	41A 401-419	OWNER'S MANUAL
	44T 3092-1-	44T 3092-1-	44T 3092-1-	44T 3092-1-	E.P.S.
	44T 3092-2-	44T 3092-2-	44T 3092-2-	44T 3092-2-	E.P.S.
	44T 3092-7-	44T 3092-7-	44T 3092-7-	44T 3092-7-	275#"AB" FLUTE
	45C 88-1-	45C 88-1-	45C 88-1-	45C 88-1-	PE
	50S 102-5-	50S 102-5-	50S 102-5-	50S 102-5-	PLASTIC
	51A 2-11-	51A 2-11-	51A 2-11-	51A 2-11-	HOT MELT GLUE
	52D 1-185-1	52D 1-185-1	52D 1-185-1	52D 1-185-1	TAPE
	52D 1-188-	52D 1-188-	52D 1-188-	52D 1-188-	PVC TAPE 8MIL BLK
			85T 413-1-		STEEL
	85T 422-1-	85T 422-1-	85T 422-1-		TIN PLATE
			89A 171-20-	89A 173-28-	POWER CORD
	89A 173-26-	89A 173-26-	89A 173-26-	89A 173-26-	CABLE ASS'Y
	89A 173-27-		89A 173-27-	89A 173-27-	CABLE ASS'Y
		89A 173-27-2!			UL2919 CABLE&HOUSING
		89A 173-28-		89A 173-28-	CABLE ASS'Y
	89A 173-28-1		89A 173-28-1		UL2464 #24&HOUSING
	89A 490-4-	89A 490-4-			POWER CORD
	95A 91-205-1	95A 91-205-1	95A 91-205-1	95A 91-205-1	UL1015&COPPER WIRE
	95A 704-2-	95A 704-2-	95A 704-2-	95A 704-2-	WIRE & HOUSING ASSY
	96A 29-8-190	96A 29-8-190	96A 29-8-190	96A 29-8-190	H.S. TUBING 7MM
	G1S 140-18-120	G1S 140-18-120	G1S 140-18-120	G1S 140-18-120	4MMX18 STEEL

APPL.	R326BSBAC (TUV/EEF-IEC950)	R-326BSDAC (TUV ONLY-IEC950)	R326BSFAC (FCC/UL)	R326BSUAC (CSA)	SPECIFICATION
	K1S 340-7-128		K1S 340-7-128	K1S 340-7-128	M4X7 STEEL
	K1S 350-25-128	K1S 350-25-128	K1S 350-25-128	K1S 350-25-128	M5X25 STEEL
	K1S 401-804-128	K1S 401-804-128	K1S 401-804-128	K1S 401-804-128	#8X1/2 STEEL
	K1S 401-805-120	K1S 401-805-120	K1S 401-805-120	K1S 401-805-120	#8X5/8
	K1S 401-806-128	K1S 401-806-128	K1S 401-806-128	K1S 401-806-128	#8X3/4
	K1S 404-603-120	K1S 404-603-120	K1S 404-603-120	K1S 404-603-120	#6X3/8
			750D 1697-50-3	750D 1697-50-3	DEGAUSSING COIL
	750A 1697-61-3	750A 1697-61-3			60T DEGAUSSING COIL
	750A 1697-61-4	750A 1697-61-4			60T DEGAUSSING COIL
	750A 5610-1	750A 5610-1	750A 5610-1-	750A 5610-1	14" N.G. 0.28MM CDT

PARTS LIST OF CHAS

APPL.	CMC-326B	CMC-326D	CMC326F	CMC-326U	SPECIFICATION
	CMPC-326B	CMPC-326D	CMPC-326F	CMPC-326U	PC BOARD
	CRPC-15T	CRPC-15T	CRPC-15T	CRPC-15T	R326 CRT BOARD
	SGPC-15K	SGPC-15K	SGPC-326F	SGPC-15K	SIGNAL BOARD
	VRPC-15K	VRPC-15K	VRPC-15K	VRPC-15K	VR CONTROL BOARD
	1T 443-2-128	1T 443-2-128	1T 443-2-128	1T 443-2-128	M3X6 STEEL
	3C 1-40-106	3C 1-40-106	3C 1-40-106	3C 1-40-106	LOCK WASHER
	15T 5464-1-	15T 5464-1-	15T 5464-1-	15T 5464-1-	TERNEPLATE
	15T 5471-1-	15T 5471-1-	15T 5471-1-	15T 5471-1-	TERNEPLATE
	40A 154-13-	40A 154-13-	40A 154-13-	40A 154-13-	CHASSIS LABEL
			40A 156-15-1	40A 156-15-1	WARNING LABEL
	40A 581-26-011	40A 581-26-011	40A 581-26-011	40A 581-26-011	LABEL/BLANK
	50S 102-5-	50S 102-5-	50S 102-5-	50S 102-5-	PLASTIC
	77A 267-7-	77A 267-7-	77A 267-7-	77A 267-7-	POWER SW
	87A 501-4-	87A 501-4-	87A 501-4-	87A 501-4-	AC SOCKET (EAR B)
	95A 800-2-2		95A 800-2-2		UL1015#18 YEL/GRN
			95A 800-6-9		UL1015#20&HOUS.&CORE
	95A 800-7-				UL1672#22BRN/BLU/COR
	95A 205T-30-072	95A 205T-30-072	95A 205T-30-072	95A 205T-30-072	UL1015#18TOP.BLK.
		95S 207T-354-042		95S 207T-354-042	UL1015#18/YEL GRN
			95A 3253-3-2	95A 3253-3-2	UL1015#20/3P HOUSING
				95A 3253-3-11	UL1015#20/BRN/BLU
		95a 3253-3-12			UL1672#22 BLU/BRN
	95A 3253-3-13	95A 3253-3-13			UL1672#22 BLU/BRN
	96A 29-6-190	96A 29-6-190	96A 29-6-190	96A 29-6-190	H.S. TUBING 4MM
	K1S 330-5-128	K1S 330-5-128	K1S 330-5-128	K1S 330-5-128	M3X5 STEEL
	K1S 404-603-120	K1S 404-603-120	K1S 404-603-120	K1S 404-603-120	#6X3/8
	M1S 440-6-127	M1S 440-6-127	M1S 440-6-127	M1S 440-6-127	M4X6
	700 99-42-	700 99-42-	700 99-42-	700 99-42-	AS REQUEST

PARTS LIST OF CRT BOARD (UNIQUE)

APPL.	CRPC-15T	SPECIFICATION
	CRPC-325AI	AUTO INSERTION
	87A 400-1-	CRT SOCKET
	95S 90-22-	#22 TIN COATED
	95A 1019-611-3	UL2468#24/WHTX3C
	715A 395-2-	108.0X108.0X1.6MM
C801	64A 140-29-59	0.22UF +-5% 250V
C802	64A 140-29-59	0.22UF +-5% 250V
C803	64A 140-29-59	0.22UF +-5% 250V
C805	65S 450-104-4	.1UF +80-20% Z5V 50V
C806	65A 517K-222-1A	2200PF K Z5F 500V
C807	65A 517K-222-1A	2200PF K Z5F 500V
C808	65A 517K-222-1A	2200PF K Z5F 500V
C809	65A 517K-102-1A	1000PF K Z5F 500V
C810	65A 517K-102-1A	1000PF K Z5F 500V
C811	65A 517K-102-1A	1000PF K Z5F 500V
C812	65S 450-104-4	.1UF +80-20% Z5V 50V
C813	65A 452-104-3	.1UF +80-20% 16V Z5U
C814	65A 2M-103-3B	0.01UF 2KV 20% Z5U
C816	67D 90-15-	1UF 350V

APPL.		CRPC-15T	SPECIFICATION
C817		65A 517K-222-1A	2200PF K Z5F 500V
J703		95S 90-23-A	TIN COATED
J704		95S 90-22-	#22 TIN COATED
L801		73C 145-688-	0.68UH+–10%
L802	⚠	73C 145-688-	0.68UH+–10%
L803		73C 145-688-	0.68UH+–10%
L804		71A 65-1-	BEAD INDUCTOR
LC801		53A 40-1-	.022UF +50–20 50V 7A
LC802		53A 40-1-	.022UF +50-20 50V 7A
P801		33T 3072-12-	3P PLUG PLASTIC
P807		33T 3074-2-	3P PLUG
P904		33T 3072-16-	2P PLUG
P905		33T 3072-16-	2P PLUG
P906		33T 3072-16-	2P PLUG
Q801		57A 444-1-	TRANSISTOR/2SA1018QR
Q802		57A 444-1-	TRANSISTOR/2SA1018QR
Q803		57A 444-1-	TRANSISTOR/2SA1018QR
Q804		57B 419-Q-	TRANSISTOR
Q805		57A 543-Q-	TRANSISTOR/2SC1473Q
Q806		57A 543-Q-	TRANSISTOR/2SC1473Q
Q807		57A 543-Q-	TRANSISTOR/2SC1473Q
Q808		57B 419-Q-	TRANSISTOR
R808		61A 602-224-65	220K OHM 5% 1/6W
R822		61A 602-333-65	33K OHM 5% 1/6W
R828		61A 602-562-65	5.6K OHM 5% 1/6W
VR801		75A 325-104-	100K OHM +–20%
VR802		75A 325-104-	100K OHM +–20%
VR803		75A 325-104-	100K OHM +–20%

PARTS LIST OF CRT BOARD (COMMON)

APPL.	CRPC-325AI	SPECIFICATION
	52D 1-191-	GLASS CLOTH
	52D 1-192-	GLASS CLOTH
D801	93C 64-19-52T	DIODE 1SS82
D802	93C 64-19-52T	DIODE 1SS82
D803	93C 64-19-52T	DIODE 1SS82
R801	61A 602-821-52T	820OHM +–5%
R802	61A 602-821-52T	820OHM +–5% 1/6W
R803	61A 602-821-52T	820OHM +–5% 1/6W
R804	61S 175-101-52T	100OHM +–5% 1/2w
R805	61S 175-101-52T	100OHM +–5% 1/2W
R806	61S 175-101-52T	100OHM +–5% 1/2W
R807	61A 602-224-52T	220K OHM 5% 1/6W
R808	61A 602-224-52T	220K OHM 5% 1/6W
R809	61A 602-2244-52T	220K OHM 5% 1/6W
R810	61A 602-274-52T	270KOHM +–5% 1/6W
R811	61A 602-274-52T	270KOHM +–5% 1/6W
R812	61A 602-274-52T	270KOHM +–5% 1/6W
R813	61A 602-184-52T	180KOHM +–5% 1/6W
R814	61A 602-184-52T	180KOHM +–5% 1/6W
R815	61A 602-184-52T	180KOHM +–5% 1/6W
R816	61A 602-333-52T	33K OHM 5% 1/6W
R817	61A 602-333-52T	33K OHM 5% 1/6W
R818	61A 602-333-52T	33K OHM 5% 1/6W
R819	61A 602-682-52T	6.8K OHM 5% 1/6W
R820	61A 602-123-52T	12K OHM 5% 1/6W
R821	61A 602-332-52T	3.3K OHM 5% 1/6W
R823	61A 602-333-52T	33K OHM 5% 1/6W
R824	61A 602-333-52T	33K OHM 5% 1/6W
R825	61A 602-683-52T	68K OHM +–5% 1/6W
R826	61A 602-683-52T	68K OHM +–5% 1/6W
R827	61A 602-683-52T	68K OHM +–5% 1/6W
R830	61S 602-102-52T	1K OHM 5% 1/6W
R831	61A 602-331-52T	330 OHM 5% 1/6W
R832	61A 602-222-52T	2.2KOHM +–5% 1/6W
R840	61S 172-472-52T	4.7K OHM 5% 1/4W

PARTS LIST OF SIGNAL BOARD (UNIQUE)

APPL.	SGPC-15K	SGPC-326F	SPECIFICATION
	SGPC-326AI	SGPC-326AI	AUTO INSERTION
	1T 420-3-120	1T 420-3-120	3MMX8 STEEL
	9S 203-8-	9S 203-8-	BRASS
	15T 5482-1-	15T 5482-1-	TERNEPLATE
	33T 3072-16-	33T 3072-16-	2P PLUG
	52D 1-191-	52D 1-191-	GLASS CLOTH
	52D 1-192-	52D 1-192-	GLASS CLOTH
	89A 8205-2-9	89A 8205-2-9	UL1365#30/BLK
	90T 185-1-	90T 185-1-	ALUMINUM
	90T 231-1-	90T 231-1-	ALUMINUM
		95 205T-30-02T	95S205-30&9A206-13X2
	K1S 330-7-128	K1S 330-7-128	M3X7 STEEL
	M1S 330-6-120	M1S 330-6-120	3MMX6 STEEL
	715A 408-1-	715A 408-1-	163.0X170/0X1.6MM
C101	67A 301-101-3	67A 301-101-3	100UF +-20% 16V
C102	67A 301-101-3	67A 301-101-3	100UF +-20% 16V
C104	67A 301-470-3	67A 301-470-3	47UF +-20% 16V
C105	67A 301-470-3	67A 301-470-3	47UF +-20% 16V
C106	67A 301-470-3	67A 301-470-3	47UF +-20% 16V
C108	67A 301-229-7	67A 301-229-7	2.2UF +-20% 50V
C109	67A 301-470-3	67A 301-470-3	47UF +-20% 16V
C110	67A 301-221-3	67A 301-221-3	220UF +-20% 16V
C111	65S 444-271-1	65S 444-271-1	270PF K Z5P 50V
C112	67A 301-100-7	67A 301-100-7	10UF +-20% 50V
C113	67A 301-100-7	67A 301-100-7	10UF +-20% 50V
C114	65A 452-104-3	65A 452-104-3	.1UF +80-20% 16V Z5U
C117	64A 177-1-58	64A 177-1-58	0.001UF J 50V
C118	65A 452-104-3	65A 452-104-3	.1UF +80-20% 16V Z5U
C119	67A 301-109-7	67A 301-109-7	1UF +-20% 50V
C120	67A 301-229-7	67A 301-229-7	2.2UF +-20% 50V
C121	64A 177-3-58	64A 177-3-58	0.0015UF J 50V
C122	64A 177-1-58	64A 177-1-58	0.001UF J 50V
C123	65A 452-104-3	65A 452-104-3	.1UF +80-20% 16V Z5U
C124	65A 452-104-3	65A 452-104-3	.1UF +80-20% 16V Z5U
C127	67A 301-221-3	67A 301-221-3	220UF +-20% 16V
C128	65A 452-104-3	65A 452-104-3	.1UF +80-20% 16V Z5U
C129	67A 301-221-3	67A 301-221-3	220UF +-20% 16V
C130	65S 442-120-1	65S 442-120-1	12PF J NPO 50V
C140		65A 452-104-4	.1UF +80-20% 16V Z5V
C141		65A 452-104-4	.1UF +80-20% 16V Z5V
C142		65A 452-104-4	.1UF +80-20% 16V Z5V
C682	67A 301-471-1	67A 301-471-1	470UF +-20% 6.3V
C688	67A 301-221-3	67A 301-221-3	220UF +-20% 16V
C701	67A 402-470-3	67A 402-470-3	47 UF +-20% 16V
C702	67A 402-470-3	67A 402-470-3	47 UF +-20% 16V
C703	67A 402-470-3	67A 402-470-3	47 UF +-20% 16V
C704	65A 452-104-3	65A 452-104-3	.1UF +80-20% 16V Z5U
C705	65A 452-104-3	65A 452-104-3	.1UF +80-20% 16V Z5U
C707	67A 304-229-7	67A 304-229-7	2.2UF +100-10% 50V
C708	67A 304-229-7	67A 304-229-7	2.2UF +100-10% 50V
C709	67A 304-229-7	67A 304-229-7	2.2UF +100-10% 50V
C710	65A 452-104-3	65A 452-104-3	.1UF +80-20% 16V Z5U
C711	65A 452-104-3	65A 452-104-3	.1UF +80-20% 16V Z5U
C712	67A 201-471-3	67A 201-471-3	470UF +-20% 16V
C713	67A 301-330-3	67A 301-330-3	33UF +-20% 16V
C714	67A 301-330-3	67A 301-330-3	33UF +-20% 16V
C715	65A 452-104-3	65A 452-104-3	.1UF +80-20% 16V Z5U
C716	65A 452-104-3	65A 452-104-3	.1UF +80-20% 16V Z5U
C717	65A 452-104-3	65A 452-104-3	.1UF +80-20% 16V Z5u
C718		65S 442-151-1	150PF J NPO 50V
C718	65S 442-820-1		82PF J NPO 50V
C719		65S 442-151-1	150PF J NPO 50V
C719	65S 442-820-1		82PF J NPO 50V
C720		65S 442-151-1	150PF J NPO 50V
C720	65S 442-820-1		82PF J NPO 50V
C721	65S 422-103-3	65S 422-103-3	.01UF M Z5U 500V
C722	65S 422-103-3	65S 422-103-3	.01UF M Z5U 500V
C723	65S 422-103-3	65S 422-103-3	.01UF M Z5U 500V
C724	67A 301-109-10	67A 301-109-10	1UF +-20% 160V
C725	67A 301-109-10	67A 301-109-10	1UF +-20% 160V
C726	67A 301-109-10	67A 301-109-10	1UF +-20% 160V
C727	65S 444-102-1	65S 444-102-1	1000PF K Z5P 50V
C728	65S 444-102-1	65S 444-102-1	1000PF K Z5P 50V
C729	65S 444-102-1	65S 444-102-1	1000PF K Z5P 50V
C730	67A 301-479-7	67A 301-479-7	4.7UF +-20% 50V

APPL.	SGPC-15K	SGPC-326F	SPECIFICATION
C731		65A 452-104-4	.1UF +80–20% 16V Z5U
C733	64A 103-24-	64A 103-24-	0.0012UF %% 50V
C734	64A 177-15-58	64A 177-15-58	0.015UF J 50V
C740	67A 301-470-3	67A 301-470-3	47UF +–20% 16V
C741	67A 301-479-7	67A 301-479-7	4.7UF +–20% 50V
C743	67A 301-229-9	67A 301-229-9	2.2UF +–20% 100V
C744	67A 301-470-4	67A 301-470-4	47UF +–20% 25V
C745	65A 452-104-3	65A 452-104-3	.1UF +80–20% 16V Z5U
C746	65A 452-104-3	65A 452-104-3	.1UF +80–20% 16V Z5U
C747	65A 452-104-3	65A 452-104-3	.1UF +80–20% 16V Z5U
C748	65A 452-104-3	65A 452-104-3	.1UF +80–20% 16V Z5U
C749	65A 452-104-3	65A 452-104-3	.1UF +80–20% 16V Z5U
D701	93C 64-11H-	93C 64-11H-	DIODE
IC101	56A 74S-473-	56A 74S-473-	20 PIN IC
IC104	56A 308-1-H	56A 308-1-H	14 PIN IC
IC105	56A 74LS-123-H	56A 74LS-123-H	16 PIN IC
IC105	56A 74LS-123-M	56A 74LS-123-M	16 PIN IC
IC105	56A 74LS-123-T	56A 74LS-123-T	16 PIN IC
IC106	56A 74LS-136-H	56A 74LS-136-H	14 PIN IC
IC106	56A 74LS-136-M	56A 74LS-136-M	14 PIN IC
IC106	56A 74LS-136-T	56A 74LS-136-T	14 PIN IC
IC701	56A 367-1-	56A 367-1-	30 PIN IC/M51387P
IC702	56A 74LS-86-H	56A 74LS-86-H	14 PIN IC
IC703	56A 74LS-86-H	56A 74LS-86-H	14 PIN IC
IC704	56A 267-1-	56A 267-1-	16PIN IC/MC4051B
IC705	56A 74LS-221-H	56A 74LS-221-H	16 PIN IC
J701	95S 90-22-	95S 90-22-	#22 TIN COATED
L104	73C 145-569-	73C 145-569-	5.6UH +–10%
L105	73C 145-569-	73C 145-569-	5.6UH +–10%
L681	73C 259-2-	73C 259-2-	30UH +/–15%
L684	73C 259-2-	73C 259-2-	30UH +/–15%
L701	73C 145-109-	73C 145-109-	1UH+–10%
L702	73C 145-109-	73C 145-109-	1UH+–10%
L703	73C 145-109-	73C 145-109-	1UH+–10%
L704	73C 145-109-	73C 145-109-	1UH+–10%
L705	73C 145-109-	73C 145-109-	1UH+–10%
L706	73C 145-109-	73C 145-109-	1UH+–10%
L708	73C 145-689-	73C 145-689-	6.8UH +–10%
LC101	53A 40-1-	53A 40-1-	.022UF +50–20 50V 7A
LC102		53A 40-2-	EMI FILTER TS04201NC
LC102	71A 65-1-		BEAD INDUCTOR
LC103		53A 40-2-	EMI FILTER TS04201NC
LC103	71A 65-1-		BEAD INDUCTOR
LC104		53A 40-2-	EMI FILTER TS04201NC
LC104	71A 65-1-		BEAD INDUCTOR
LC701	53A 40-1-	53A 40-1-	.022UF +50–20 50V 7A
LC703	53A 40-1-	53A 40-1-	.022UF +50–20 50V 7A
LC704	53A 40-1-	53A 40-1-	.022UF +50–20 50V 7A
LC705	53A 40-1-	53A 40-1-	.022UF +50–20 50V 7A
LC706	53A 40-1-	53A 40-1-	.022UF +5–20 50V 7A
LC707	53A 40-1-	53A 40-1-	.022UF +50–20 50V 7A
P100	33T 3072-14-	33T 3072-14-	5P PLUG PLASTIC
P101	33T 3072-2	33T 3072-2	6P PLUG PLASTIC
P102	33T 3072-8-	33T 3072-8-	4P PLUG PLASTIC
P103	33T 3072-4-	33T 3072-4-	7P PLUG PLASTIC
P104	33T 3072-8-	33T 3072-8-	4P PLUG PLASTIC
P105	33T 3072-8-	33T 3072-8-	4P PLUG PLASTIC
P106	33T 3072-8-	33T 3072-8-	4P PLUG PLASTIC
P701	33T 3072-8-	33T 3072-8-	4P PLUG PLASTIC
P702	33T 3072-12-	33T 3072-12-	3P PLUG PLASTIC
Q101	57A 431-3-	57A 431-3-	TRANSISTOR
Q102	57B 419-P-	57B 419-P-	TRANSISTOR
Q103	57B 420-P-	57B 420-P-	TRANSISTOR
Q104	57B 419-Q-	57B 419-Q-	TRANSISTOR
Q105	57B 419-Q-	57B 419-Q-	TRANSISTOR
Q106	57B 419-Q-	57B 419-Q-	TRANSISTOR
Q107	57B 419-Q-	57B 419-Q-	TRANSISTOR
Q108	57B 419-Q-	57B 419-Q-	TRANSISTOR
Q109	57B 419-Q-	57B 419-Q-	TRANSISTOR
Q110	57B 419-Q-	57B 419-Q-	TRANSISTOR
Q111	57B 419-Q-	57B 419-Q-	TRANSISTOR
Q112	57B 419-Q-	57B 419-Q-	TRANSISTOR
Q114	57A 453-1-	57A 453-1-	TRANSISTOR
Q115	57A 453-1-	57A 453-1-	TRANSISTOR
Q116	57A 453-1-	57A 453-1-	TRANSISTOR
Q117	57B 419-Q-	57B 419-Q-	TRANSISTOR
Q118	57B 419-Q-	57B 419-Q-	TRANSISTOR

APPL.	SGPC-15K	SGPC-326F	SPECIFICATION
Q119	57B 419-Q-	57B 419-Q-	TRANSISTOR
Q120	57A 453-1-	57A 453-1-	TRANSISTOR
Q121	57B 419-P-	57B 419-P-	TRANSISTOR
Q122	57B 419-P-	57B 419-P-	TRANSISTOR
Q123	57B 419-P-	57B 419-P-	TRANSISTOR
Q124	57B 419-P-	57B 419-P-	TRANSISTOR
Q125	57B 419-P-	57B 419-P-	TRANSISTOR
Q128	57A 453-1-	57A 453-1-	TRANSISTOR
Q129	57B 419-P-	57B 419-P-	TRANSISTOR
Q701	57A 595-1-	57A 595-1-	TRANSISTOR/2SC2408
Q702	57A 595-1-	57A 595-1-	TRANSISTOR/2SC2408
Q703	57A 595-1-	57A 595-1-	TRANSISTOR/2SC2408
Q704	57A 509-1-	57A 509-1-	TRANSISTOR/2SC3953DE
Q705	57A 509-1-	57A 509-1-	TRANSISTOR/2SC3953DE
Q706	57A 509-1-	57A 509-1-	TRANSISTOR/2SC3953DE
Q707	57A 509-1-	57A 509-1-	TRANSISTOR/2SC3953DE
Q708	57A 509-1-	57A 509-1-	TRANSISTOR/2SC3953DE
Q709	57A 509-1-	57A 509-1-	TRANSISTOR/2SC3953DE
Q710	57A 535-1-	57A 535-1-	TRANSISTOR/2SA1538DE
Q711	57A 535-1-	57A 535-1-	TRANSISTOR/2SA1538DE
Q712	57A 535-1-	57A 535-1-	TRANSISTOR/2SA1538DE
Q713	57A 548-Q-	57A 548-Q-	HIGH S.W. TRANSISTOR
Q714	57A 548-Q-	57A 548-Q-	HIGH S.W. TRANSISTOR
Q715	57A 548-Q-	57A 548-Q-	HIGH S.W. TRANSISTOR
Q716	57A 453-1-	57A 453-1-	TRANSISTOR
Q717	57A 420-Q-	57A 420-Q-	TRANSISTOR
Q718	57B 419-Q-	57B 419-Q-	TRANSISTOR
Q721	57B 419-Q-	57B 419-Q-	TRANSISTOR
Q722	57A 420-Q-	57A 420-Q-	TRANSISTOR
Q723	57B 419-Q-	57B 419-Q-	TRANSISTOR
Q724	57B 419-Q-	57B 419-Q-	TRANSISTOR
Q725	57B 419-Q-	57B 419-Q-	TRANSISTOR
Q726	57A 431-3-	57A 431-3-	TRANSISTOR
R727	61A 602-822-65	61A 602-822-65	8.2K OHM 5% 1/6W
R728	61D 20-201-	61D 20-201-	1K OHM 5% 7W
R729	61D 20-201-	61D 20-201-	1K OHM 5% 7W
R730	61S 20-201-	61S 20-201-	1K OHM 5% 7W
R731	61S 172-330-57	61S 172-330-57	33 OHM 5% 1/4W
R736	61S 172-330-57	61S 172-330-57	33 OHM 5% 1/4W
R766	95S 90-22-	95S 90-22-	#22 TIN COATED
R795	61S 153M-121-59	61S 153M-121-59	120 OHM J 3W
SW101	77A 413-1-	77A 413-1-	SIGNAL SW
VR701	75D 345-502-	75D 345-502-	VR. 5K OHM H TYPE
VR702	75D 345-502-	75D 345-502-	VR. 5K OHM H TYPE
VR703	75D 345-502-	75D 345-502-	VR. 5K OHM H TYPE
VR704	75A 345-103-	75A 345-103-	10K OHM
VR711	75A 345-503-	75A 345-503-	50KOHM +—20%
VR712	75A 345-503-	75A 345-503-	50KOHM +—20%
VR713	75A 345-503-	75A 345-503-	50KOHM +—20%
VR714	75A 345-503-	75A 345-503-	50KOHM +—20%
VR716	75A 345-503-	75A 345-503-	50KOHM +—20%
VR717	75A 345-503-	75A 345-503-	50KOHM +—20%
VR718	75A 345-503-	75A 345-503-	50KOHM +—20%
ZD701	93D 39-69-	93D 39-69-	6.9-7.2V

PARTS LIST OF SIGNAL BOARD (COMMON)

APPL.	SGPC-326AI	SPECIFICATION
	52D 1-191-	GLASS CLOTH
	52D 1-192-	GLASS CLOTH
D101	93C 64-11H-52T	DIODE
D102	93C 64-11H-52T	DIODE
D103	93C 64-11H-52T	DIODE
D104	93C 64-11H-52T	DIODE
D105	93C 64-11H-52T	DIODE
D106	93C 64-11H-52T	DIODE
D107	93C 64-11H-52T	DIODE
D108	93C 64-11H-52T	DIODE
D109	93C 64-11H-52T	DIODE
D110	93C 64-11H-52T	DIODE
D122	93C 64-11H-52T	DIODE
D123	93C 64-11H-52T	DIODE

APPL.	SGPC-326AI	SPECIFICATION
D124	93C 64-11H-52T	DIODE
D702	93C 64-11H-52T	DIODE
D703	93C 64-11H-52T	DIODE
D704	93C 64-11H-52T	DIODE
D705	93C 64-11H-52T	DIODE
D706	93C 64-11H-52T	DIODE
D707	93C 64-11H-52T	DIODE
D708	93C 60-38-52T	1A 200V
D709	93C 64-11H-52T	DIODE
R101	61S 602-122-52T	1.2KOHM +5% 1/6W
R102	61S 602-122-52T	1.2KOHM +5% 1/6W
R103	61S 175-751-52T	750OHM +–5% 1/2W
R104	61A 602-222-52T	2.2KOHM +–5% 1/6W
R105	61A 602-222-52T	2.2KOHM +–5% 1/6W
R106	61S 602-102-52T	1K OHM 5% 1/6W
R107	61A 602-392-52T	3.9K OHM 5% 1/6W
R109	61S 602-102-52T	1K OHM 5% 1/6W
R110	61S 172-151-52T	150 OHM 5% 1/4W
R111	61A 602-751-52T	750OHM +–5% 1/6W
R112	61A 602-681-52T	680OHM +–5% 1/6W
R113	61S 602-152-52T	1.5KOHM +–5% 1/6W
R114	61A 602-681-52T	680OHM +–5% 1/6W
R115	61S 602-152-52T	1.5KOHM +–5% 1/6W
R116	61A 602-822-52T	8.2K OHM +–5% 1/6W
R117	61A 602-332-52T	3.3K OHM %% 1/6W
R118	61S 602-101-52T	100 OHM 5% 1/6W
R119	61S 172-820-52T	82OHM +–5% 1/4W
R121	61S 602-102-52T	1K OHM 5% 1/6W
R122	61S 172-151-52T	150 OHM 5% 1/4W
R123	61A 602-751-52T	750OHM +–5% 1/6W
R124	61A 602-681-52T	680OHM +–5% 1/6W
R125	61S 602-152-52T	1.5kohm +–5% 1/6W
R126	61A 602-681-52T	680OHM +–5% 1/6W
R127	61S 602-152-52T	1.5KOHM +–5% 1/6W
R128	61A 602-822-52T	8.2K OHM +–5% 1/6W
R129	61A 602-332-52T	3.3K OHM 5% 1/6W
R130	61S 602-111-52T	110OHM +–5% 1/6W
R131	61S 172-820-52T	82OHM +–%% 1/4W
R132	61A 602-222-52T	2.2KOHM +–5% 1/6W
R133	61S 602-102-52T	1K OHM 5% 1/6W
R134	61S 172-151-52T	150 OHM 5% 1/4W
R135	61A 602-751-52T	750OHM +–5% 1/6W
R136	61A 602-681-52T	680OHM +–5% 1/6W
R137	61S 602-152-52T	1.5KOHM 3–5% 1/6W
R138	61A 602-681-52T	680OHM +–5% 1/6W
R139	61S 602-152-52T	1.5KOHM +–5% 1/6W
R140	61A 602-822-52T	8.2K OHM +–5% 1/6W
R141	61A 602-332-52T	3.3K OHM 5% 1/6W
R142	61S 602-111-52T	110OHM +–5% 1/6W
R143	61S 172-820-52T	82OHM +–5% 1/4W
R145	61A 602-561-52T	560 OHM +–5% 1/6W
R150	61A 602-562-52T	5.6K OHM 5% 1/6W
R151	61A 602-562-52T	5.6K OHM 5% 1/6W
R152	61S 602-471-52T	470OHM +–5% 1/6W
R153	61A 602-272-52T	2.7K OHM 5% 1/6W
R154	61A 602-103-52T	10K OHM 5% 1/6W
R155	61A 602-823-52T	82KOHM +–5% 1/6W
R156	61A 602-103-52T	10K OHM 5% 1/6W
R157	61S 602-122-52T	1.2KOHM +5% 1/6W
R158	61S 602-221-52T	220OHM +–5% 1/6W
R159	61A 602-222-52T	2.2KOHM +–5% 1/6W
R160	61A 602-104-52T	100K OHM 5% 1/6W
R161	61A 602-332-52T	3.3K OHM 5% 1/6W
R162	61A 602-332-52T	3.3K OHM 5% 1/6W
R163	61A 602-222-52T	2.2KOHM +–5% 1/6W
R164	61A 602-331-52T	330 OHM 5% 1/6W
R165	61A 602-822-52T	8.2K OHM +–5% 1/6W
R166	61A 602-222-52T	2.2KOHM +–5% 1/6W
R167	61A 602-272-52T	2.7K OHM 5% 1/6W
R168	61A 602-123-52T	12K OHM 5% 1/6W
R169	61A 602-562-52T	5.6K OHM 5% 1/6W
R170	61A 602-562-52T	5.6K OHM 5% 1/6W
R171	61A 602-222-52T	2.2KOHM +–5% 1/6W
R172	61A 602-822-52T	8.2K OHM +–5% 1/6W
R173	61A 602-822-52T	8.2K OHM +–5% 1/6W
R174	61A 602-332-52T	3.3K OHM 5% 1/6W
R175	61A 602-103-52T	10K OHM 5% 1/6W

APPL.	SGPC-326AI	SPECIFICATION
R176	61A 602-562-52T	5.6K OHM 5% 1/6W
R178	61A 602-222-52T	2.2KOHM +–5% 1/6W
R179	61A 602-222-52T	2.2KOHM +–5% 1/6W
R181	61A 602-222-52T	2.2KOHM +–5% 1/6W
R182	61A 602-222-52T	2.2KOHM +–5% 1/6W
R184	61A 602-562-52T	5.6K OHM 5% 1/6W
R186	61S 602-109-52T	10HM +–5% 1/6W
R187	61A 602-392-52T	3.9K OHM 5% 1/6W
R188	61S 602-102-52T	1K OHM 5% 1/6W
R190	61A 602-511-52T	510 OHM +–5% 1/6W
R195	61A 602-822-52T	8.2K OHM +–5% 1/6W
R196	61A 602-394-52T	390K OHM +–5% 1/6W
R197	61A 602-223-52T	22K OHM 5% 1/6W
R198	61A 602-223-52T	22K OHM 5% 1/6W
R1A1	61S 602-563-52T	56KOHM +–5% 1/6W
R1A2	61S 602-563-52T	56KOHM +–5% 1/6W
R1A3	61S 602-563-52T	56KOHM +–5% 1/6W
R1A4	61S 602-563-52T	56KOHM +–5% 1/6W
R1A5	61S 602-563-52T	56KOHM +–5% 1/6W
R1A6	61S 602-563-52T	56KOHM +–5% 1/6W
R1A7	61S 602-563-52T	56KOHM +–5% 1/6w
R1A8	61S 602-563-52T	56KOHM +–5% 1/6W
R1B1	61S 602-471-52T	470OHM +–5% 1/6W
R1B2	61S 602-471-52T	470OHM +–5% 1/6W
R1B3	61S 602-471-52T	470OHM +–5% 1/6W
R1B4	61S 602-471-52T	470OHM +–5% 1/6W
R1B5	61S 602-471-52T	470OHM +–5% 1/6W
R1B6	61S 602-471-52T	470OHM +–5% 1/6W
R1B7	61S 602-471-52T	470OHM +–5% 1/6W
R1B8	61S 602-471-52T	470OHM +–5% 1/6W
R681	61S 172-102-52T	1K OHM 5% 1/4W
R701	61A 602-103-52T	10K OHM 5% 1/6W
R702	61A 602-103-52T	10K OHM 5% 1/6W
R703	61A 602-103-52T	10K OHM 5% 1/6W
R704	61A 602-113-52T	11KOHM +–5% 1/6W
R705	61A 602-113-52T	11KOHM +–5% 1/6W
R706	61A 602-113-52T	11KOHM +–5% 1/6W
R707	61A 602-561-52T	560 OHM +–5% 1/6W
R708	61A 602-752-52T	7.5K OHM +–5% 1/6W
R709	61A 602-562-52T	5.6K OHM 5% 1/6W
R710	61A 602-332-52T	3.3K OHM 5% 1/6W
R711	61A 602-332-52T	3.3K OHM 5% 1/6W
R712	61A 602-332-52T	3.3K OHM 5% 1/6W
R713	61A 602-271-52T	270OHM +–5% 1/6W
R714	61A 602-271-52T	270OHM +–5% 1/6W
R715	61A 602-271-52T	270OHM +–5% 1/6W
R716	61S 602-560-52T	56OHM +–5% 1/6w
R717	61S 602-560-52T	56OHM +–5% 1/6W
R718	61S 602-560-52T	56OHM +–5% 1/6W
R719	61S 175-560-52T	56 OHM +–5% 1/2W
R720	61S 175-560-52T	56 OHM +–5% 1/2W
R721	61S 175-560-52T	56 OHM +–5% 1/2W
R722	61S 602-470-52T	47OHM +–5% 1/6W
R723	61S 602-470-52T	47OHM +–5% 1/6W
R724	61S 602-470-52T	47OHM +–5% 1/6W
R725	61A 602-822-52T	8.2K OHM +–5% 1/6W
R726	61A 602-822-52T	8.2K OHM +–5% 1/6W
R732	61S 172-330-52T	33 OHM +–5% 1/4W
R733	61S 172-330-52T	33 OHM +–5% 1/4W
R734	61S 172-330-52T	33 OHM +–5% 1/4W
R735	61S 172-330-52T	33 OHM +–5% 1/4W
R737	61A 602-562-52T	5.6K OHM 5% 1/6W
R738	61S 602-471-52T	470OHM +–5% 1/6W
R739	61S 602-471-52T	470OHM +–5% 1/6W
R740	61S 602-471-52T	470OHM +–5% 1/6W
R741	61S 602-122-52T	1.2KOHM +5% 1/6W
R742	61S 602-122-52T	1.2KOHM +5% 1/6W
R743	61S 602-122-52T	1.2KOHM +5% 1/6W
R744	61A 602-272-52T	2.7K OHM 5% 1/6W
R745	61A 602-562-52T	5.6K OHM 5% 1/6W
R746	61A 602-103-52T	10K OHM 5% 1/6W
R747	61A 602-222-52T	2.2KOHM +–5% 1/6W
R748	61S 602-102-52T	1K OHM 5% 1/6W
R749	61S 602-102-52T	1K OHM 5% 1/6W
R750	61S 602-122-52T	1.2KOHM +5% 1/6W
R755	61S 602-152-52T	1.5KOHM +–5% 1/6W
R756	61A 602-822-52T	8.2K OHM +–5% 1/6W

APPL.	SGPC-326AI	SPECIFICATION
R757	61S 175-331-52T	330 OHM +–5% 1/2W
R764	95S 90-23-A	TIN COATED
R765	95S 90-23-A	TIN COATED
R770	61S 602-330-52T	33OHM +–5% 1/6W
R771	61A 602-222-52T	2.2KOHM +–5% 1/6W
R772	61A 602-223-52T	22K OHM 5% 1/6W
R773	61A 602-472-52T	4.7K OHM 5% 1/6W
R774	61A 602-472-52T	4.7K OHM 5% 1/6W
R780	61S 602-101-52T	100 OHM 5% 1/6W
R781	61A 602-103-52T	10K OHM 5% 1/6W
R782	61S 602-101-52T	100 OHM 5% 1/6W
R783	61A 602-472-52T	4.7K OHM 5% 1/6W
R784	61A 602-103-52T	10K OHM 5% 1/6W
R785	61A 602-562-52T	5.6K OHM 5% 1/6W
R786	61A 602-103-52T	10K OHM 5% 1/6W
R787	61S 602-563-52T	56KOHM +–5% 1/6W
R788	61A 602-562-52T	5.6K OHM 5% 1/6W
R789	61S 172-103-52T	10K OHM 5% 1/4W
R791	61A 602-103-52T	10k ohm 5% 1/6W
R792	61A 602-562-52T	5.6K OHM 5% 1/6W
R793	61A 602-222-52T	2.2KOHM +–5% 1/6W
R794	61A 602-103-52T	10K OHM 5% 1/6W
ZD101	93D 39-80-52T	9.1V +–5% 1/2W
ZD102	93D 39-52-52T	DIODE
ZD702	93D 39-68-52T	11.44-12.03V DIODE

PARTS LIST OF VR CONTROL BOARD

APPL.	VRPC-15K	SPECIFICATION
	15T 5470-1-	TERNEPLATE
	15T 5478-1-	TERNEPLATE
	95S 201-59-092	UL1007 #22/WHT TOP
	95S 201-59-102	UL1007 #22 WHT TOP
	95A 1019-610-6	UL2464 #24/6P HOUSING
	95A 1019-611-4	UL2468 #24/WHT X 4C
	95A 1019-613-4	UL2468 #24/WHT X 4C
	95A 1019-616-7	UL2468 #24/WHT X 7C
	95A 1019-618-3	UL2468 #24/WHT X 3C
	95A 1019-620-3	UL2468 #24/WHT X 3c
	715A 415-1-	48.0X126.0X1.6MM
D1	81A 7-2-	LED
D1	81A 7-2-1	GREEN LED
D2	81A 7-2-	LED
D2	81A 7-2-1	GREEN LED
D3	81A 7-2-	LED
D3	81A 7-2-1	GREEN LED
J1001	95S 90-22-	#22 TIN COATED
J1002	95S 90-22-	#22 TIN COATED
J1003	95S 90-22-	#22 TIN COATED
J1004	95S 90-22-	#22 TIN COATED
J1005	95S 90-22-	#22 TIN COATED
J1006	95S 90-22-	#22 TIN COATED
J1007	95S 90-22-	#22 TIN COATED
J1008	95S 90-22-	#22 LIN COATED
R1001	61A 602-153-65	15K OHM 5% 1/6W
R1002	61A 602-333-65	33K OHM 5% 1/6W
SW1	77A 401-11-	SLIDE SW
SW2	77A 401-11-	SLIDE SW
SW3	77A 401-11-	SLIDE SW
SW4	77A 403-3-	SWITCH
VR1	**75A 350-203-27A**	**20K OHM +–20% B**
VR2	75A 350-203-27A	20K OHM +–20% B
VR3	75A 350-103-57A	10K OHM +–20% B
VR4	**75A 348-103-23B**	**10KOHM +–20% B**
VR5	**75A 348-103-23B**	**10KOHM +–20% B**

PARTS LIST OF MAIN BOARD (UNIQUE)

APPL.	CMPC-326B	CMPC-326D	CMPC-326F	CMPC-326U	SPECIFICATION
	CM326-AI	CM326-AI	CM326-AI	CM326-AI	AUTO INSERTION
	1T 420-3-120	1T 420-3-120	1T 420-3-120	1T 420-3-120	3MMX8 STEEL
	5B 38-8-	5B 38-8-			RUBBER WASHER
	5B 39-8-	5B 39-8-	5B 39-8-	5B 39-8-	WASHER
	5B 40-2-	5B 40-2-	5B 40-2-	5B 40-2-	INSULATING WAS HER
	5B 42-1-	5B 42-1-	5B 42-1-	5B 42-1-	NYLON
	9A 92-13-	9A 92-13-	9A 92-13-	9A 92-13-	BRASS
	9S 203-8-	9S 203-8-	9S 203-8-	9S 203-8-	BRASS
	15T 5456-1-	15T 5456-1-	15T 5456-1-	15T 5456-1-	TERNEPLATE
	32T 3028-2-	32T 3028-2-	32T 3028-2-	32T 3028-2-	MICA INSULATOR
	32T 3028-3-	32T 3028-3-	32T 3028-3-	32T 3028-3-	MICA
	33T 3378-1-	33T 3378-1-	33T 3378-1-	33T 3378-1-	NYLON STANDOFF
	50S 102-5-	50S 102-5-			PLASTIC
	50T 106-1-	50T 106-1-			CABLE TIE
	52D 1-191-	52D 1-191-	52D 1-191-	52D 1-191-	GLASS CLOTH
	52D 1-192-	52D 1-192-	52D 1-192-	52D 1-192-	GLASS CLOTH
	71A 55-2-		71A 55-2-		FERRITE BEAD
	85T 419-1-	85T 419-1-			TIN PLATE
	89A 8310-1-	89A 8310-1-			UL2464 #18X4C
	90T 136-3-	90T 136-3-	90T 136-3-	90T 136-3-	HEAT SINK
	90T 189-6-	90T 189-6-	90T 189-6-	90T 189-6-	HEAT SINK
	90T 190-2-	90T 190-2-	90T 190-2-	90T 190-2-	HEAT SINK
	90T 247-1-	90T 247-1-	90T 247-1-	90T 247-1-	HEAT SINK
	95S 203-59-142	95S 203-59-142	95S 203-59-142	95S 203-59-142	UL1007 #22/WHT STRAND
	95A 1019-610-4	95A 1019-610-4	95A 1019-610-4	95A 1019-610-4	UL2464 #24/4P HOUSING
	95A 1019-612-4	95A 1019-612-4	95A 1019-612-4	95A 1019-612-4	UL2464 #24/4P HOUSING
	95S 3261-2-	95S 3261-2-	95S 3261-2-	95S 3261-2-	UL1015 #22/WHT
	95A 3261-3-10	95A 3261-3-10	95A 3261-3-10	95A 3261-3-10	UL1007 #18 STRAND
	K1S 330-10-128	K1S 330-10-128	K1S 330-10-128	K1S 330-10-128	M3X10
	K1S 330-14-128	K1S 330-14-128	K1S 330-14-128	K1S 330-14-128	M3X14
	K1S 404-602-120	K1S 404-602-120			#6X1/4
	K1S 404-603-120	K1S 404-603-120	K1S 404-603-120	K1S 404-603-120	#6X3/8
	M2S 430-2.4-128	M2S 430-2.4-128	M2S 430-2.4-128	M2S 430-2.4-128	M3
	715A 406-2-	715A 406-2-	715A 406-2-	715A 406-2-	246X278X1.6(MM)
C2001	67A 301-470-7	67A 301-470-7	67A 301-470-7	67A 301-470-7	47UF +–20% 50V
C2002	67A 301-470-3	67A 301-470-3	67A 301-470-3	67A 301-470-3	47UF +–20% 16V
C2004	67A 301-100-7	67A 301-100-7	67A 301-100-7	67A 301-100-7	10UF +–20% 50V
C401	67A 301-101-3	67A 301-101-3	67A 301-101-3	67A 301-101-3	100UF +–20% 16V
C402	64A 177-25-57	64A 177-25-57	64A 177-25-57	64A 177-25-57	0.1UF J 50V
C403	64A 177-31-57	64A 177-31-57	64A 177-31-57	64A 177-31-57	0.33UF J 50V
C404	64A 177-25-57	64A 177-25-57	64A 177-25-57	64A 177-25-57	0.1UF J 50V
C405	64A 177-25-57	64A 177-25-57	64A 177-25-57	64A 177-25-57	0.1UF J 50V
C406	67A 201-221-6	67A 201-221-6	67A 201-221-6	67A 201-221-6	220UF +–20% 35V
C407	67A 301-470-4	67A 301-470-4	67A 301-470-4	67A 301-470-4	47UF +–20% 25V
C408	67A 201-222-4	67A 201-222-4	67A 201-222-4	67A 201-222-4	2200UF +–20% 25V
C409	67A 301-100-7	67A 301-100-7	67A 301-100-7	67A 301-100-7	10UF +–20% 50V
C410	65S 450-103-3	65S 450-103-3	65S 450-103-3	65S 450-103-3	10000PF 50V Z5U
C411	67A 301-100-7	67A 301-100-7	67A 301-100-7	67A 301-100-7	10UF +–20% 50V
C412	64A 177-29-57	64A 177-29-57	64A 177-29-57	64A 177-29-57	0.22UF J 50V
C414	67A 301-479-7	67A 301-479-7	67A 301-479-7	67A 301-479-7	4.7UF +–20% 50V
C415	67A 301-229-7	67A 301-229-7	67A 301-229-7	67A 301-229-7	2.2UF +–20% 50V
C416	67A 60-220-3	67A 60-220-3	67A 60-220-3	67A 60-220-3	22UF 16V NP
C417	65S 450-472-3	65S 450-472-3	65S 450-472-3	65S 450-472-3	.0047UF Z5U 50V
C422	67A 301-101-6	67A 301-101-6	67A 301-101-6	67A 301-101-6	100UF +–20% 35V
C424	67A 305-229-7	67A 305-229-7	67A 305-229-7	67A 305-229-7	2.2UF +–20% 50V
C425	67A 201-102-6	67A 201-102-6	67A 201-102-6	67A 201-102-6	1000UF +–20% 35V
C470	67A 301-470-3	67A 301-470-3	67A 301-470-3	67A 301-470-3	47UF +–20% 16V
C501	65S 444-101-1	65S 444-101-1	65S 444-101-1	65S 444-101-1	100PF K Z5P 50V
C502	64A 177-3-58	64A 177-3-58	64A 177-3-58	64A 177-3-58	0.0015UF J 50V
C503	65S 442-271-1	65S 442-271-1	65S 442-271-1	65S 442-271-1	270PF 5% 50V NPO
C504	64A 177-11-58	64A 177-11-58	64A 177-11-58	64A 177-11-58	0.0068UF J 50V
C505	67S 202-109-7	67S 202-109-7	67S 202-109-7	67S 202-109-7	1UF +–10% 35V
C506	64A 177-13-58	64A 177-13-58	64A 177-13-58	64A 177-13-58	0.01UF J 50V
C507	67S 202-109-7	67S 202-109-7	67S 202-109-7	67S 202-109-7	1UF +–10% 35V
C508	64A 103-55-	64A 103-55-	64A 103-55-	64A 103-55-	.0033UF +/-5% 50V
C509	67A 301-221-3	67A 301-221-3	67A 301-221-3	67A 301-221-3	220UF +–20% 16V
C510	64A 177-13-58	64A 177-13-58	64A 177-13-58	64A 177-13-58	0.01UF J 50V
C511	67A 402-109-7	67A 402-109-7	67A 402-109-7	67A 402-109-7	1UF 50V +–20%
C512	65S 444-102-1	65S 444-102-1	65S 444-102-1	65S 444-102-1	1000PF K Z5P 50V
C513	63A 210-29-	63A 210-29-	63A 210-29-	63A 210-29-	0.0036UF +–5% 2000V
C514	63A 210-22-	63A 210-22-	63A 210-22-	63A 210-22-	0.0012UF +–5% 2000V
C515	64A 140-50-64	64A 140-50-64	64A 140-50-64	64A 140-50-64	0.015UF J 400V
C516	67A 201-100-10	67A 201-100-10	67A 201-100-10	67A 201-100-10	10UF +–20% 160V
C517	64A 140-52-64	64A 140-52-64	64A 140-52-64	64A 140-52-64	0.022UF J 400V

APPL.		CMPC-326B	CMPC-326D	CMPC-326F	CMPC-326U	SPECIFICATION
C518		67A 201-100-11	67A 201-100-11	67A 201-100-11	67A 201-100-11	10UF +–20% 200V
C519		67A 201-220-9	67A 201-220-9	67A 201-220-9	67A 201-220-9	22UF +–20% 100V
C520	⚠	65A 517K-561-2A	65A 517K-561-2A	65A 517K-561-2A	65A 517K-561-2A	560PF K Z5P 500V
C521		65A 517K-331-2A	65A 517K-331-2A	65A 517K-331-2A	65A 517K-331-2A	300PF K Z5P 500V
C522		63A 210-34-	63A 210-34-	63A 210-34-	63A 210-34-	0.64UF +–5% 200V
C523		63A 210-33-	63A 210-33-	63A 210-33-	63A 210-33-	0.068UF +–5% 1200V
C524		65A 517K-221-2A	65A 517K-221-2A	65A 517K-221-2A	65A 517K-221-2A	220PF K Z5P 500V
C526		64A 177-25-57	64A 177-25-57	64A 177-25-57	64A 177-25-57	0.1UF J 50V
C527		65S 444-102-1	65S 444-102-1	65S 444-102-1	65S 444-102-1	1000PF K Z5P 50V
C551		64A 177-3-58	64A 177-3-58	64A 177-3-58	64A 177-3-58	0.0015UF J 50V
C552		67S 202-229-7	67S 202-229-7	67S 202-229-7	67S 202-229-7	2.2UF +–10% 35V
C553		67A 301-470-4	67A 301-470-4	67A 301-470-4	67A 301-470-4	47UF +–20% 25V
C557		63A 210-34-	63A 210-34-	63A 210-34-	63A 210-34-	0.64UF +–5% 200V
C558		63A 210-34-	63A 210-34-	63A 210-34-	63A 210-34-	0.64UF +–5% 200V
C559		65S 450-103-3	65S 450-103-3	65S 450-103-3	65S 450-103-3	10000PF 50V Z5U
C560		65S 450-103-3	65S 450-103-3	65S 450-103-3	65S 450-103-3	10000PF 50V Z5U
C561		65S 450-103-3	65S 450-103-3	65S 450-103-3	65S 450-103-3	10000PF 50V Z5U
C562	⚠	65S 444-101-1	65S 444-101-1	65S 444-101-1	65S 444-101-1	100PF K Z5P 50V
C563		64A 103-54-	64A 103-54-	64A 103-54-	64A 103-54-	.0022UF +/–5% 50V
C565		64A 177-11-58	64A 177-11-58	64A 177-11-58	64A 177-11-58	0.0068UF J 50V
C566		64A 103-20-	64A 103-20-	64A 103-20-	64A 103-20-	0.0056UF 50V
C567		65S 444-102-1	65S 444-102-1	65S 444-102-1	65S 444-102-1	1000PF K Z5P 50V
C568		65S 444-681-1	65S 444-681-1	65S 444-681-1	65S 444-681-1	680PF K Z5P 50V
C600				67D 30-38-	67D 30-38-	470UF 200V
C600		67D 30-49-	67D 30-49-			470UF 250V 105C
C601		63A 107-7-				1UF +–20% 250VAC
C601			63A 107-10-	63A 107-10-	63A 107-10-	.1UF +–20% 250V AC
C602				63A 107-10-	63A 107-10-	.1UF +–20% 250V AC
C603		65A 305M-472-2B	65A 305M-472-2B			4700P +–20% 400V AC
C603				65A 307M-472-2B	65A 307M-472-2B	4700PF +–20% 400V AC
C604		65A 305M-472-2B	65A 305M-472-2B			4700P +–20% 400V AC
C604				65A 307M-472-2B	65A 307M-472-2B	4700PF +–20% 400V AC
C605				63A 107-10-	63A 107-10-	.1UF +–20% 250V AC
C606		65A 517K-472-1B	65A 517K-472-1B	65A 517K-472-1B	65A 517K-472-1B	4700PF K Z5F 500V
C607		65A 517K-472-1B	65A 517K-472-1B	65A 517K-472-1B	65A 517K-472-1B	4700PF K Z5F 500V
C608		65A 517K-472-1B	65A 517K-472-1B	65A 517K-472-1B	65A 517K-472-1B	4700PF K Z5F 500V
C609		65A 517K-472-1B	65A 517K-472-1B	65A 517K-472-1B	65A 517K-472-1B	4700PF K Z5F 500V
C610				67D 30-38-	67D 30-38-	470UF 200V
C610		67D 30-49-	67D 30-49-			470UF 250V 105C
C613		65A 307M-222-2B	65A 307M-222-2B			2200PF +–20% 400V AC
C613				65A 307M-472-2B	65A 307M-472-2B	4700PF +–20% 400V AC
C614		65S 444-472-1	65S 444-472-1	65S 444-472-1	65S 444-472-1	4700PF K Z5P 50V
C615		65S 444-472-1	65S 444-472-1	65S 444-472-1	65S 444-472-1	4700PF K Z5P 50V
C616		64A 177-5-58	64A 177-5-58	64A 177-5-58	64A 177-5-58	0.0022UF J 50V
C617		65S 444-472-1	65S 444-472-1	65S 444-472-1	65S 444-472-1	4700PF K Z5P 50V
C618		65S 444-472-1	65S 444-472-1	65S 444-472-1	65S 444-472-1	4700PF K Z5P 50V
C619		64A 177-5-58	64A 177-5-58	64A 177-5-58	64A 177-5-58	0.0022UF J 50V
C621		65A 2K-561-2BN	65A 2K-561-2BN	65A 2K-561-2BN	65A 2K-561-2BN	560PF K 2KV BN
C622		64A 140-13-57	64A 140-13-57	64A 140-13-57	64A 140-13-57	0.01UF K 200V
C623	⚠	64A 177-13-58	64A 177-13-58	64A 177-13-58	64A 177-13-58	0.01UF J 50V
C626		64A 177-25-57	64A 177-25-57	64A 177-25-57	64A 177-25-57	0.1UF J 50V
C641		67A 308-101-10	67A 308-101-10	67A 308-101-10	67A 308-101-10	100UF +–20% 160V
C642		67A 305-102-6	67A 305-102-6	67A 305-102-6	67A 305-102-6	1000UF +–20% 35V
C643		67A 305-471-6	67A 305-471-6	67A 305-471-6	67A 305-471-6	470UF +–20% 35V
C644		67A 305-102-3	67A 305-102-3	67A 305-102-3	67A 305-102-3	1000UF +–20% 16V
C645		67A 305-471-3	67A 305-471-3	67A 305-471-3	67A 305-471-3	470UF +–20% 16V
C646		67A 305-102-2	67A 305-102-2	67A 305-102-2	67A 305-102-2	CAP. 1000UF+–20%10V
C647		67S 305-471-2	67S 305-471-2	67S 305-471-2	67S 305-471-2	470UF +–20% 10V
C648	⚠	67A 305-102-2	67A 305-102-2	67A 305-102-2	67A 305-102-2	CAP. 1000UF+–20% 10V
C649		67S 305-471-2	67S 305-471-2	67S 305-471-2	67S 305-471-2	470UF +–20% 10V
C651		67A 308-101-10	67A 308-101-10	67A 308-101-10	67A 308-101-10	100UF +–20% 160V
C652		64A 177-13-58	64A 177-13-58	64A 177-13-58	64A 177-13-58	0.01UF J 50V
C653		64A 140-17-57	64A 140-17-57	64A 140-17-57	64A 140-17-57	.022UF J 200V
C654		64A 177-25-57	64A 177-25-57	64A 177-25-57	64A 177-25-57	0.1UF J 50V
C660		67A 305-229-7	67A 305-229-7	67A 305-229-7	67A 305-229-7	2.2UF 3–20% 50V
C661		65A 1K-102-2RS	65A 1K-102-2RS	65A 1K-102-2RS	65A 1K-102-2RS	1000PF +–10% 1KV
C662		64A 177-15-58	64A 177-15-58	64A 177-15-58	64A 177-15-58	0.015UF J 50V
C663		64A 177-25-57	64A 177-25-57	64A 177-25-57	64A 177-25-57	0.1UF J 50V
C670		67A 30-50-	67A 30-50-	67A 30-50-	67A 30-50-	CAP. 330UF+–20% 200V
C672		67A 305-471-3	67A 305-471-3	67A 305-471-3	67A 305-471-3	470UF +–20% 16V
C673				67A 301-109-10	67A 301-109-10	1UF +–20% 160V
C673		67A 308-109-11	67A 308-109-11	67A 308-109-11	67A 308-109-11	1UF +–20% 200V
C674		65S 444-103-1	65S 444-103-1	65S 444-103-1	65S 444-103-1	10000PF K Z5P 50V
C675		64A 177-25-58	64A 177-25-58	64A 177-25-58	64A 177-25-58	0.1UF J 50V
C678	⚠	64A 177-5-58	64A 177-5-58	64A 177-5-58	64A 177-5-58	0.0022UF J 50V
C681		65A 2M-221-3A	65A 2M-221-3A	65A 2M-221-3A	65A 2M-221-3A	220PF M Z5U 2KV
CN601		33A 3355-1-	33A 3355-1-	33A 3355-1-	33A 3355-1-	2 PIN PLUG

APPL.	CMPC-326B	CMPC-326D	CMPC-326F	CMPC-326U	SPECIFICATION
CN602	33T 3074-1-	33T 3074-1-	33T 3074-1-	33T 3074-1-	2P PLUG
CN603	33A 3355-1-	33A 3355-1-	33A 3355-1-	33A 3355-1-	2 PIN PLUG
CN604	33A 3355-1-	33A 3355-1-	33A 3355-1-	33A 3355-1-	2 PIN PLUG
D501	93D 60-78-	93D 60-78-	93D 60-78-	93D 60-78-	DIODE
D502	93C 60-44-	93C 60-44-	93C 60-44-	93C 60-44-	1.5A 1KV 250 N.S.
D506	93D 60-78-	93D 60-78-	93D 60-78-	93D 60-78-	DIODE
D507	93C 60-44-	93C 60-44-	93C 60-44-	93C 60-44-	1.5A 1KV 250 N.S.
D604	93C 52-9-	93C 52-9-		93C 52-9-	2A 600V
D604			93A 52-41A-		600V/3A RECTIFIER
D605	93C 52-9-	93C 52-9-		93C 52-9-	2A 600V
D605			93A 52-41A-		600V63A RECTIFIER
D641	93A 60-63-	93A 60-63-	93A 60-63-	93A 60-63-	F.R.DIODE 200V/3A
D642	93D 60-79-	93D 60-79-	93D 60-79-	93D 60-79-	3A 100V FRD
D643	93D 60-65-	93D 60-65-	93D 60-65-	93D 60-65-	3A 40V SBD
D645	93D 60-80-	93D 60-80-	93D 60-80-	93D 60-80-	3A 600V FRD
D646			93C 64-11H-	93C 64-11H-	DIODE
D647			93C 64-11H-	93C 64-11H-	DIODE
D649	93D 60-80	93D 60-80-	93D 60-80	93D 60-80-	3A 600V FRD
D670	93A 60-73A-	93A 60-73A-	93A 60-73A-	93A 60-73A-	F.R.D. 3A/400V
D671			93C 64-11H-	93C 64-11H	DIODE
F601			84C 7-45-	84C 7-45-	FUSE 2.5A 250V S-B
F601	84A 38-8-	84A 38-8-			FUSE 2.5A/250V
FH001	84B 33-4-	84B 33-4-	84B 33-4-	84B 33-4-	FUSE CLIP
FH001	84C 33-7-	84C 33-7-	84C 33-7-	84C 33-7-	FUSE CLIP
IC401	56A 326-1-	56A 326-1-	56A 326-1-	56A 326-1-	20 PIN I.C.
IC402	56 325-2-	56 325-2-	56 325-2-	56 325-2-	15 PIN I.C. TDA1675
IC403	56A 192-1-	56A 192-1-	56A 192-1-	56A 192-1-	8 PIN IC
IC551	56A 329-1-	56A 329-1-	56A 329-1-	56A 329-1-	8 PIN IC
IC551	56 329-2-	56 329-2-	56 329-2-	56 329-2-	8P IC XR-4151
IC552	56A 328-1-	56A 328-1-	56A 328-1-	56A 328-1-	8 PIN IC UPC4557C
IC553	56A 210-2-	56A 210-2-	56A 210-2-	56A 210-2-	14 PIN IC UPC339C
IC554	56A 328-1-	56A 328-1-	56A 328-1-	56A 328-1-	8 PIN IC UPC4557C
IC555	56A 265-2-	56A 265-2-	56A 265-2-	56A 265-2-	14 PIN IC UPD4066BC
IC640	56A 158-1-	56A 158-1-	56A 158-1-	56A 158-1-	3PIN IC TL431CLP
IC640	56A 158-2-	56A 158-2-	56A 158-2-	56A 158-2-	3 PIN IC TL431C/T.I.
IC670	56A 158-1-	56A 158-1-	56A 158-1-	56A 158-1-	3 PIN IC TL431CLP
IC670	56A 158-2-	56A 158-2-	56A 158-2-	56A 158-2-	3 PIN IC TL431C/T.I.
J700	95S 90-22-	95S 90-22-	95S 90-22-	95S 90-22-	#22 TIN COATED
J701				61D 58-1-	5 OHM
J701			95S 90-22-		#22 TIN COATED
J702	95S 90-22-	95S 90-22-	95S 90-22-	95S 90-22-	#22 TIN COATED
J705	95S 90-22-	95S 90-22-	95S 90-22-	95S 90-22-	#22TIN COATED
J725	95S 90-22-	95S 90-22-	95S 90-22-	95S 90-22-	#22 TIN COATED
J726	95S 90-22-	95S 90-22-	95S 90-22-	95S 90-22-	#22 TIN COATED
J727	95S 90-22-	95S 90-22-	95S 90-22-	95S 90-22-	#22 TIN COATED
J728	95S 90-22-	95S 90-22-	95S 90-22-	95S 90-22-	#22 TIN COATED
J784	95S 90-22-	95S 90-22-	95S 90-22-	95S 90-22-	#22 TIN COATED
L501	73A 253-37-	73A 253-37-	73A 253-37-	73A 253-37-	50UH +—10% 2A
L502	73A 253-32-	73A 253-32-	73A 253-32-	73A 253-32-	5.6UH +—10% 3A
L504	73A 147-31-	73A 147-31-	73A 147-31-	73A 147-31-	21.3UH +—10%
L505	94A 483-21-1	94A 483-21-1	94A 483-21-1	94A 483-21-1	WIDTH COIL
L507	73A 253-44-	73A 253-44-	73A 253-44-	73A 253-44-	800UH +—10% 0.3A
L601	73A 174-2-	73A 174-2-	73A 174-2-	73A 174-2-	COIL 25MH MIN.
L602			73C 173-2-	73C 173-2-	3MH
L602	73C 173-3-	73C 173-3-			10MH
L640			73C 259-3-	73C 259-3-	100UH +/—10%
L640	73C 259-4-	73C 259-4-			200UH +/—5%
L641	73C 259-2-	73C 259-2-	73C 259-2-	73C 259-2	30UH +/—15%
L642	73C 259-2-	73C 259-2-	73C 259-2-	73C 259-2-	30UH +/—15%
L643	73C 259-1-	73C 259-1-	73C 259-1-	73C 259-1-	10UH +/—15%
L644	73C 259-1-	73C 259-1-	73C 259-1-	73C 259-1-	10UH +/—15%
LC401	53A 40-1-	53A 40-1-	53A 40-1-	53A 40-1-	.022UF +50—20 50V 7A
P401	33T 3072-2-	33T 3072-2-	33T 3072-2-	33T 3072-2-	6P PLUG PLASTIC
P500	33T 3074-5-	33T 3074-5-	33T 3074-5-	33T 3074-5-	6P PLUG
P503	33T 3074-1-	33T 3074-1-	33T 3074-1-	33T 3074-1-	2P PLUG
P605	33T 3072-12-	33T 3072-12-	33T 3072-12-	33T 3072-12-	3P PLUG PLASTIC
Q402	57A 549-1-	57A 549-1-	57A 549-1-	57A 549-1-	TRANSISTOR
Q403	57A 507-L-	57A 507-L-	57A 507-L-	57A 507-L-	TRANSISTOR
Q404	57B 419-Q-	57B 419-Q-	57B 419-Q-	57B 419-Q-	TRANSISTOR
Q405	57A 520-S	57A 520-S-	57A 520-S-	57A 520-S-	TRANSISTOR
Q406	57B 419-Q-	57B 419-Q-	57B 419-Q-	57B 419-Q-	TRANSISTOR
Q501	57B 419-Q-	57B 419-Q-	57B 419-Q-	57B 419-Q-	TRANSISTOR
Q502	57A 521-C-	57A 521-C-	57A 521-C-	57A 521-C-	TRANSISTOR
Q503	57A 551-1-	57A 551-1-	57A 551-1-	57A 551-1-	TRANSISTOR
Q504	57B 419-Q-	57B 419-Q-	57B 419-Q-	57B 419-Q-	TRANSISTOR
Q551	57A 552-P-	57A 552-P-	57A 552-P-	57A 552-P-	TRANSISTOR
Q551	57A 552-Q-	57A 552-Q-	57A 552-Q-	57A 552-Q-	TRANSISTOR

APPL.	CMPC-326B	CMPC-326D	CMPC-326F	CMPC-326U	SPECIFICATION
Q552	57B 419-Q-	57B 419-Q-	57B 419-Q-	57B 419-Q-	TRANSISTOR
Q554	57A 554-1-	57A 554-1-	57A 554-1-	57A 554-1-	TRANSISTOR
Q557	57A 554-3-	57A 554-3-	57A 554-3-	57A 554-3-	TRANSISTOR
Q558	57A 554-3-	57A 554-3-	57A 554-3-	57A 554-3-	TRANSISTOR
Q610	57B 419-P-	57B 419-P-	57B 419-P-	57B 419-P-	TRANSISTOR
Q611	57A 507-2-	57A 507-2-	57A 507-2-	57A 507-2-	TRANSISTOR
Q612	57B 419-P-	57B 419-P-	57B 419-P-	57B 419-P-	TRANSISTOR
Q613	57A 507-2-	57A 507-2-	57A 507-2-	57A 507-2-	TRANSISTOR
Q621	57A 560-1	57A 560-1	57A 560-1	57A 560-1	TRANSISTOR
Q622	57A 507-2-	57A 507-2-	57A 507-2-	57A 507-2-	TRANSISTOR
Q623	57A 446-1-	57A 446-1-	57A 446-1-	57A 446-1-	TRANSISTOR
Q641	57B 420-P-	57B 420-P-	57B 420-P-	57B 420-P-	TRANSISTOR
Q642	57A 446-1-	57A 446-1-	57A 446-1-	57A 446-1-	TRANSISTOR
Q661	57A 593-2-	57A 593-2-	57A 593-2-	57A 593-2-	TR. 2SC2898
Q662	57A 507-2-	57A 507-2-	57A 507-2-	57A 507-2-	TRANSISTOR
Q663	57A 446-1-	57A 446-1-	57A 446-1-	57A 446-1-	TRANSISTOR
Q671	57B 420-P-	57B 420-P-	57B 420-P-	57B 420-P-	TRANSISTOR
R2001	61A 301-229-64	61A 301-229-64	61A 301-229-64	61A 301-229-64	2.2OHM +–5% 1/2W
R2007	61A 301-229-64	61A 301-229-64	61A 301-229-64	61A 301-229-64	2.20OHM +–5% 162W
R401	61S 152M-221-64	61S 152M-221-64	61S 152M-221-64	61S 152M-221-64	220 OHM 5% 2W
R411	61S 208-109-64	61S 208-109-64	61S 208-109-64	61S 208-109-64	1OHM +–5% 1W
R413	61S 152M-221-64	61S 152M-221-64	61S 152M-221-64	61S 152M-221-64	220 OHM 5% 2W
R500	61S 153M-339-59	61S 153M-339-59	61S 153M-339-59	61S 153M-339-59	3.3 OHM 5% 3W
R519	61S 153M-221-59	61S 153M-221-59	61S 153M-221-59	61S 153M-221-59	220 OHM 5% 3W
R522	61A 301-479-64	61A 301-479-64	61A 301-479-64	61A 301-479-64	4.7OHM +–5% 1/2W
R523	61A 301-229-64	61A 301-229-64	61A 301-229-64	61A 301-229-64	2.2OHM +–5% 1/2W
R526	61S 152M-330-64	61S 152M-330-64	61S 152M-330-64	61S 152M-330-64	33 OHM 5% 2W
R527	61S 175-105-64	61S 175-105-64	61S 175-105-64	61S 175-105-64	1MEG OHM 5% 1/2W
R528	61S 175-105-64	61S 175-105-64	61S 175-105-64	61S 175-105-64	1MEG OHM 5% 1/2W
R529	61S 175-105-64	61S 175-105-64	61S 175-105-64	61S 175-105-64	1MEG OHM 5% 1/2W
R530	61S 175L-184-64	61S 175L-184-64	61S 175L-184-64	61S 175L-184-64	180K OHM 5% 1/2W
R538	61A 177-104-57	61A 177-104-57		61A 177-104-57	100K OHM 1% 1/4W
R556	61A 177-392-57	61A 177-392-57	61A 177-392-57	61A 177-392-57	3.9KOHM +/–2% 1/4W
R557	61A 177-273-57	61A 177-273-57	61A 177-273-57	61A 177-273-57	27KOHM +/–2% 1/4W
R559	61A 177-203-57	61A 177-203-57	61A 177-203-57	61A 177-203-57	20K OHM 1% 1/4W
R560		61A 177-123-57			12K OHM 1% 1/4W
R563	61A 602-153-65	61A 602-153-65	61A 602-153-65	61A 602-153-65	15K OHM 5% 1/6W
R565	61S 177-204-57	61S 177-204-57	61S 177-204-57	61S 177-204-57	200K OHM 1% 1/4W
R573	61S 177-274-57	61S 177-274-57	61S 177-274-57	61S 177-274-57	270K OHM 1% 1/4W
R574	61A 602-153-65	61A 602-153-65	61A 602-153-65	61A 602-153-65	15K OHM 5% 1/6W
R575	61S 177-561-57	61S 177-561-57	61S 177-561-57	61S 177-561-57	560OHM +/–2% 1/4W
R576	61A 177-683-57	61A 177-683-57	61A 177-683-57	61A 177-683-57	68K OHM 1% 1/4W
R578	61S 177-474-57	61S 177-474-57	61S 177-474-57	61S 177-474-57	470K OHM 1% 1/4W
R579 ⚠	61S 177-753-57	61S 177-753-57	61S 177-753-57	61S 177-753-57	75K OHM 1% 1/4W
R583	61A 177-104-57	61A 177-104-57	61A 177-104-57		100K OHM 1% 1/4W
R584	61S 177-473-57	61S 177-473-57	61S 177-473-57	61S 177-473-57	47K OHM 1% 1/4W
R602	61D 20-260-	61D 20-260-			2.4 OHM 5% 10W
R602			61D 20-265-	61D 20-265-	1.5OHM +–5% 7W
R603	61D 52-16-	61D 52-16-	61D 52-16-	61D 52-16-	18 OHM
R604	61S 20-274-	61S 20-274-	61S 20-274-	61S 20-274-	75OHM +–5% 10W
R620	61S 175L-474-64	61S 175L-474-64	61S 175L-474-64	61S 175L-474-64	470K OHM 5% 1/2W
R621 ⚠	61S 175L-474-64	61S 175L-474-64	61S 175L-474-64	61S 175L-474-64	470K OHM 5% 1/2W
R622	61A 303-228-64	61A 303-228-64	61A 303-228-64	61A 303-228-64	0.22 OHM 5% 1W
R625	61D 20-264-	61D 20-264-	61D 20-264-	61D 20-264-	2.2KOHM +–5% 7W
R627	61A 2J-688-59	61A 2J-688-59	61A 2J-688-59	61A 2J-688-59	0.68OHM +–5% 2W
R631	61A 301-228-64	61A 301-228-64	61A 301-228-64	61A 301-228-64	0.22 OHM 5% 1/2W
R632	61A 301-228-64	61A 301-228-64	61A 301-228-64	61A 301-228-64	0.22 OHM 5% 1/2w
R634	61S 152M-750-64	61S 152M-750-64	61S 152M-750-64	61S 152M-750-64	75 ohm 5% 2W
R635	61S 208-470-64	61S 208-470-64	61S 208-470-64	61S 208-470-64	47 OHM 5% 1W
R643	61A 602-102-65	61A 602-102-65	61A 602-102-65	61A 602-102-65	1K OHM 5% 1/6W
R644 ⚠	61A 602-102-65	61A 602-102-65	61A 602-102-65	61A 602-102-65	1K OHM 5% 1/6W
R645	61A 602-332-65	61A 602-332-65	61A 602-332-65	61A 602-332-65	3.3K OHM 5% 1/6W
R646	61S 602-202-65	61S 602-202-65	61S 602-202-65	61S 602-202-65	2K OHM 5% 1/6W
R647	61S 208-823-64	61S 208-823-64	61S 208-823-64	61S 208-823-64	82KOHM +–5% 1W
R657	61S 208-479-64	61S 208-479-64	61S 208-479-64	61S 208-479-64	4.7 OHM 5% 1W
R657	61S 208-519-64	61S 208-519-64	61S 208-519-64	61S 208-519-64	5.1 OHM 5% 1W
R662	61S 152M-820-64	61S 152M-820-64	61S 152M-820-64	61S 152M-820-64	82 OHM 5% 2W
R663	61A 20-275-	61A 20-275-	61A 20-275-	61A 20-275-	2KOHM +5% 5W
R665	61A 2J-478-59	61A 2J-478-59	61A 2J-478-59	61A 2J-478-59	0.47OHM +–5% 2W
R666	61S 208-470-64	61S 208-470-64	61S 208-470-64	61S 208-470-64	47 OHM 5% 1W
R670	61S 152M-163-64	61S 152M-163-64	61S 152M-163-64	61S 152M-163-64	16K OHM 5% 2W
R683 ⚠	61S 152M-470-64	61S 152M-470-64	61S 152M-470-64	61S 152M-470-64	47 OHM 5% 2W
T501	79A 167-22B-	79A 167-22B-	79A 167-22B-	79A 167-22B-	LK:380UH Max.
T502	79A 346-2-	79A 346-2-	79A 346-2-	79A 346-2-	HOT
T503	79A 196-8-	79A 196-8-	79A 196-8-	79A 196-8-	LV=460MH +/–5%
T621	80A 528-2-	80A 528-2-	80A 528-2-	80A 528-2-	SWITCHING X'FMR
T622	79A 168-2-	79A 168-2-	79A 168-2-	79A 168-2-	L:160UH

APPL.	CMPC-326B	CMPC-326D	CMPC-326F	CMPC-326U	SPECIFICATION
T623 ⚠	79A 168-2-	79A 168-2-	79A 168-2-	79A 168-2-	L:160UH
T661	**80A 517-1**	**80A 517-1**	**80A 517-1**	**80A 517-1**	**SWITCHING X'FMER**
VR2003	**75A 335-222-**	**75A 335-222-**	**75A 335-222-**	**75A 335-222-**	**2.2K OHM +–20%**
VR401	75A 335-104-	75A 335-104-	75A 335-104-	75A 335-104-	100KB OHM
VR402	61S 172-104-62	61S 172-104-62	61S 172-104-62	61S 172-104-62	100K OHM 5% 1/4W
VR404	75A 335-471-	75A 335-471-	75A 335-471-	75A 335-471-	470 OHM +–20%
VR406	75A 335-103-	75A 335-103-	75A 335-103-	75A 335-103-	10KB OHM
VR470	75A 314-501-	75A 314-501-	75A 314-501-	75A 314-501-	500 OHM +–20%
VR501	75A 335-333-	75A 335-333-	75A 335-333-	75A 335-333-	33KB OHM
VR502	75A 335-472-	75A 335-472-	75A 335-472-	75A 335-472-	4K7 OHM
VR551	75A 335-102-	75A 335-102-	75A 335-102-	75A 335-102-	1KB OHM
VR552	75A 335-332-	75A 335-332-	75A 335-332-	75A 335-332-	3K3 OHM
VR553	75A 335-473-	75A 335-473-	75A 335-473-	75A 335-473-	47K OHM +–20%
VR554 ⚠	75A 335-473-	75A 335-473-	75A 335-473-	75A 335-473-	47K OHM +–20%
VR555	75A 335-474-	75A 335-474-	75A 335-474-	75A 335-474-	470K OHM +–20%
VR640	**75A 335-471-**	**75A 335-471-**	**75A 335-471-**	**75A 335-471-**	**470 OHM +–20%**
VR670	75A 335-102-	75A 335-102-	75A 335-102-	75A 335-102-	1KB OHM

PART LIST OF MAIN BOARD (COMMON)

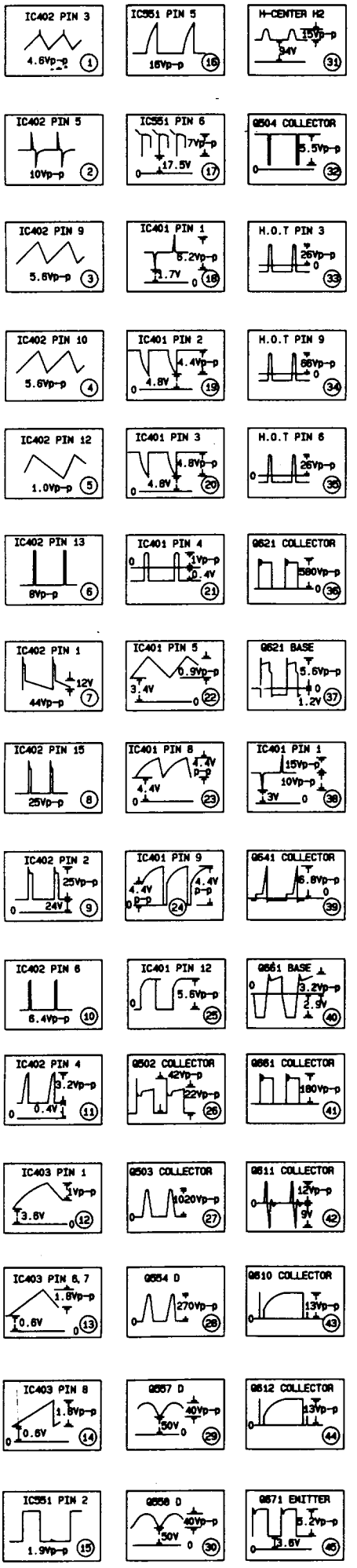
APPL.	CM326-AI	SPECIFICATION
	52D 1-191-	GLASS CLOTH
	52D 1-192-	GLASS CLOTH
D2001	93C 60-38-52T	1A 200V
D2004	93C 60-38-52T	1A 200V
D2005	93C 64-11H-52T	DIODE
D401	93C 64-11H-52T	DIODE
D402	93C 64-11H-52T	DIODE
D403	93C 64-11H-52T	DIODE
D404	93C 64-11H-52T	DIODE
D405	93C 64-11H-52T	DIODE
D406	93C 64-11H-52T	DIODE
D407	93D 52-1-52T	1A 600V
D408	93C 64-11H-52T	DIODE
D409	93C 64-11H-52T	DIODE
D410	93C 64-11H-52T	DIODE
D470	93C 60-38-52T	1A 200V
D503	93C 60-38-52T	1A 200V
D504	93C 60-38-52T	1A 200V
D505	93C 60-38-52T	1A 200V
D551	93C 64-11H-52T	DIODE
D552	93C 64-11H-52T	DIODE
D553	93C 64-11H-52T	DIODE
D554	93C 60-38-52T	1A 200V
D555	93C 60-38-52T	1A 200V
D556	93C 64-11H-52T	DIODE
D601	93C 52-9-52T	2A 600V
D602	93C 52-9-52T	2A 600V
D610	93C 52-14-52T	50A/1A RECTIFIER
D611	93C 52-14-52T	50A/1A RECTIFIER
D612	93C 52-14-52T	50A/1A RECTIFIER
D613	93C 52-14-52T	50A/1A RECTIFIER
D620	93D 60-21-52T	FRD 1.5A 500V
D621	93C 52-9-52T	2A 600V
D622	93C 52-9-52T	2A 600V
D623	93C 64-11H-52T	DIODE
D624	93C 60-77-52T	F.R.D. 100V/1A
D627	93C 60-77-52T	F.R.D. 100V/1A
D646	93C 64-11H-52T	DIODE
D647	93C 64-11H-52T	DIODE
D660	93D 60-21-52T	FRD 1.5A 500V
D661	93C 52-9-52T	2A 600V
D662	93C 52-9-52T	2A 600V
D663	93C 60-77-52T	F.R.D. 100V/1A
D664	93C 60-77-52T	F.R.D. 100V/1A
D671	93C 64-11H-52T	DIODE
D674	93C 64-11H-52T	DIODE
D676	93C 64-11H-52T	DIODE
D678	93C 64-11H-52T	DIODE
J707	95S 90-23-A	TIN COATED
J708	95S 90-23-A	TIN COATED
J709	95S 90-23-A	TIN COATED

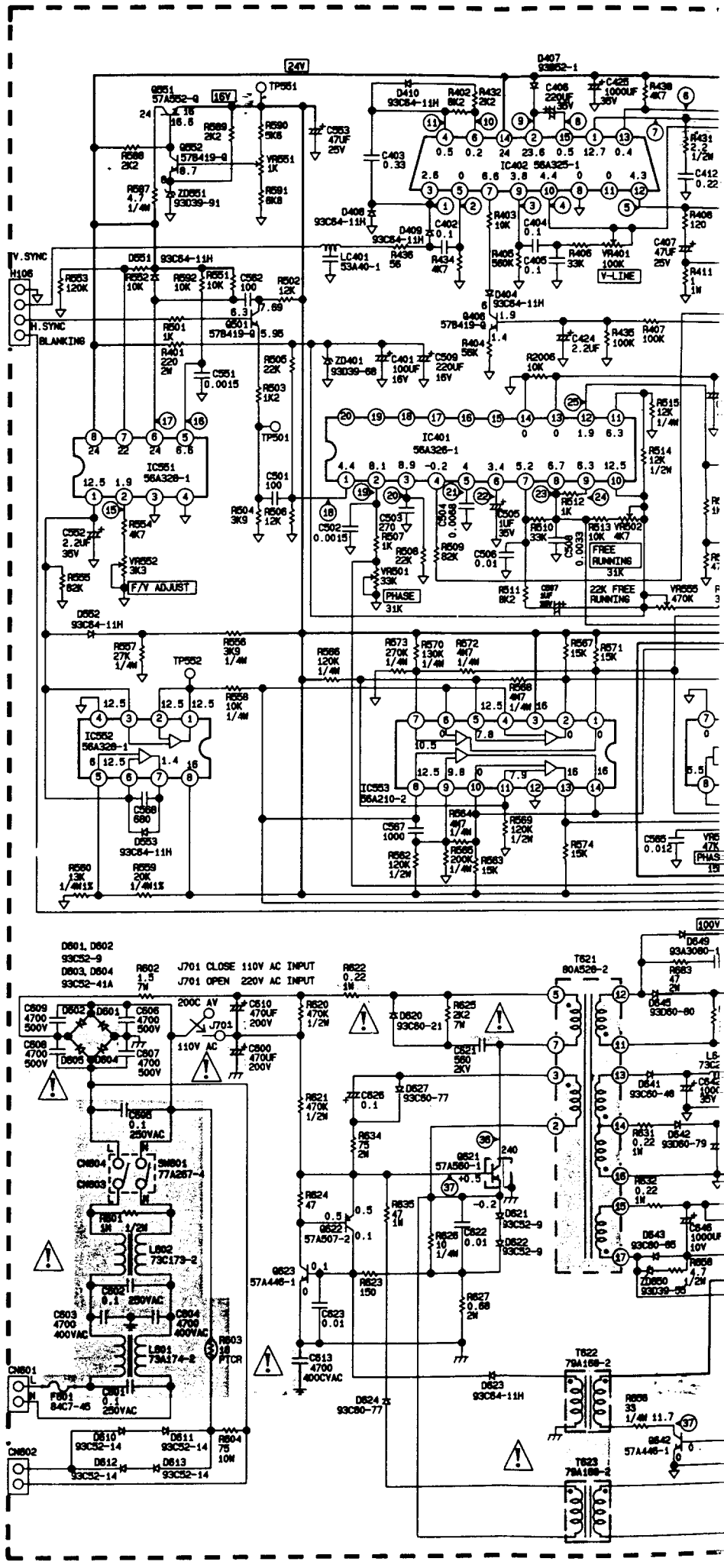
APPL.	CM326-AI	SPECIFICATION
J711	95S 90-23-A	TIN COATED
J712	95S 90-23-A	TIN COATED
J713	95S 90-23-A	TIN COATED
J714	95S 90-23-A	TIN COATED
J715	95S 90-23-A	TIN COATED
J716	95S 90-23-A	TIN COATED
J717	95S 90-23-A	TIN COATED
J718	95S 90-23-A	TIN COATED
J719	95S 90-23-A	TIN COATED
J720	95S 90-23-A	TIN COATED
J721	95S 90-23-A	TIN COATED
J722	95S 90-23-A	TIN COATED
J723	95S 90-23-A	TIN COATED
J724	95S 90-23-A	TIN COATED
J729	95S 90-23-A	TIN COATED
J730	95S 90-23-A	TIN COATED
J731	95S 90-23-A	TIN COATED
J733	95S 90-23-A	TIN COATED
J734	95S 90-23-A	TIN COATED
J735	95S 90-23-A	TIN COATED
J736	95S 90-23-A	TIN COATED
J737	95S 90-23-A	TIN COATED
J738	95S 90-23-A	TIN COATED
J739	95S 90-23-A	TIN COATED
J740	95S 90-23-A	TIN COATED
J741	95S 90-23-A	TIN COATED
J742	95S 90-23-A	TIN COATED
J743	95S 90-23-A	TIN COATED
J744	95S 90-23-A	TIN COATED
J745	95S 90-23-A	TIN COATED
J746	95S 90-23-A	TIN COATED
J747	95S 90-23-A	TIN COATED
J748	95S 90-23-A	TIN COATED
J749	95S 90-23-A	TIN COATED
J750	95S 90-23-A	TIN COATED
J751	95S 90-23-A	TIN COATED
J752	95S 90-23-A	TIN COATED
J753	95S 90-23-A	TIN COATED
J754	95S 90-23-A	TIN COATED
J755	95S 90-23-A	TIN COATED
J756	95S 90-23-A	TIN COATED
J757	95S 90-23-A	TIN COATED
J758	95S 90-23-A	TIN COATED
J759	95S 90-23-A	TIN COATED
J760	95S 90-23-A	TIN COATED
J761	95S 90-23-A	TIN COATED
J762	95S 90-23-A	TIN COATED
J763	95S 90-23-A	TIN COATED
J764	95S 90-23-A	TIN COATED
J765	95S 90-23-A	TIN COATED
J768	95S 90-23-A	TIN COATED
J769	95S 90-23-A	TIN COATED
J770	95S 90-23-A	TIN COATED
J771	95S 90-23-A	TIN COATED
J772	95S 90-23-A	TIN COATED
J773	95S 90-23-A	TIN COATED
J774	95S 90-23-A	TIN COATED
J775	95S 90-23-A	TIN COATED
J776	95S 90-23-A	TIN COATED
J777	95S 90-23-A	TIN COATED
J778	95S 90-23-A	TIN COATED
J779	95S 90-23-A	TIN COATED
J780	95S 90-23-A	TIN COATED
J781	95S 90-23-A	TIN COATED
J782	95S 90-23-A	TIN COATED
R2002	61S 172-682-52T	6.8K OHM 5% 1/4W
R2006	61A 602-103-52T	10K OHM 5% 1/6W
R2008	61A 602-822-52T	8.2K OHM +-5% 1/6W
R2009	61A 602-272-52T	2.7K OHM 5% 1/6W
R402	61A 602-822-52T	8.2K OHM +-5% 1/6W
R403	61A 602-103-52T	10K OHM 5% 1/6W
R404	61S 602-563-52T	56KOHM +-5% 1/6W
R405	61A 602-564-52T	560KOHM +-5% 1/6W
R406	61A 602-333-52T	33K OHM 5% 1/6W
R407	61A 602-104-52T	100K OHM 5% 1/6W
R408	61A 602-121-52T	120 OHM 5% 1/6W
R409	61S 602-122-52T	1.2KOHM +5% 1/6W

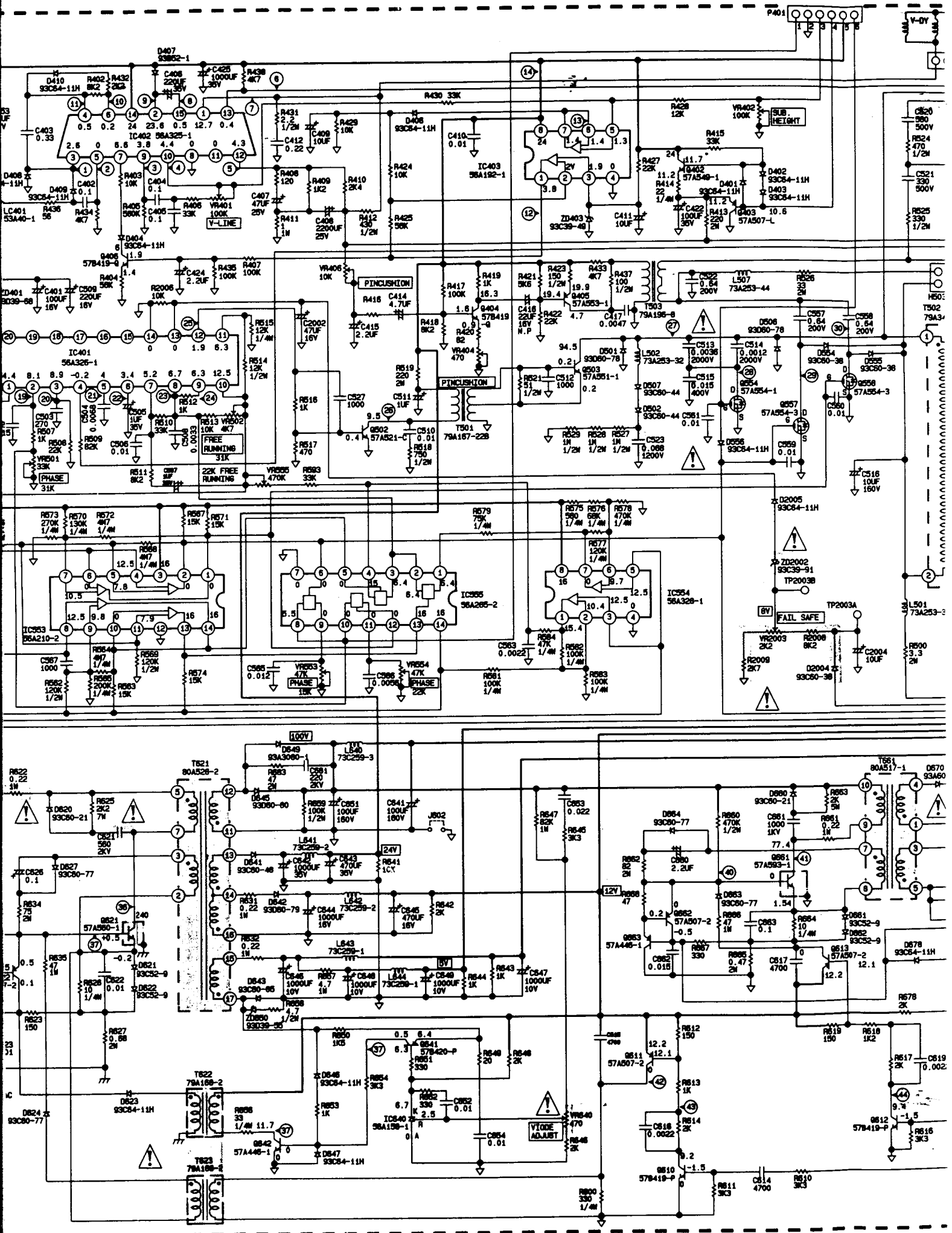
APPL.	CM326-AI	SPECIFICATION
R410	61A 602-242-52T	2.4KOHM +–5% 1/6W
R412	61S 175-431-52T	430 OHM +–5% 1/2W
R414	61S 172-220-52T	22 OHM 5% 1/4W
R415	61A 602-333-52T	33K OHM 5% 1/6W
R416	61A 602-472-52T	4.7K OHM 5% 1/6W
R417	61A 602-104-52T	100K OHM 5% 1/6W
R418	61A 602-822-52T	8.2K OHM +–5% 1/6W
R419	61S 602-102-52T	1K OHM 5% 1/6W
R420	61A 602-820-52T	82 OHM +–5% 1/6W
R421	61A 602-562-52T	5.6K OHM 5% 1/6W
R422	61A 602-223-52T	22K OHM 5% 1/6W
R423	61S 175-151-52T	150 OHM 5% 1/2W
R424	61A 602-103-52T	10K OHM 5% 1/6W
R425	61S 602-563-52T	56KOHM +–5% 1/6W
R426	61A 602-472-52T	4.7K OHM 5% 1/6W
R427	61A 602-223-52T	22K OHM 5% 1/6W
R428	61A 602-123-52T	12 OHM 5% 1/6W
R429	61A 602-103-52T	10K OHM 5% 1/6W
R430	61A 602-333-52T	33K OHM 5% 1/6W
R431	61S 175-229-52T	2.2 OHM 5% 1/2W
R432	61A 602-222-52T	2.2KOHM +–5% 1/6W
R433	61A 602-472-52T	4.7K OHM 5% 1/6W
R434	61A 602-472-52T	4.7K OHM 5% 1/6W
R435	61A 602-104-52T	100K OHM 5% 1/6W
R436	61S 602-560-52T	56OHM +–5% 1/6W
R437	61S 175-101-52T	100OHM +–5% 1/2W
R501	61S 602-102-52T	1K OHM 5% 1/6W
R502	61A 602-123-52T	12K OHM 5% 1/6W
R503	61S 602-122-52T	1.2KOHM +5% 1/6W
R504	61A 602-392-52T	3.9K OHM 5% 1/6W
R505	61A 602-223-52T	22K OHM 5% 1/6W
R506	61A 602-123-52T	12K OHM 5% 1/6W
R507	61S 602-102-52T	1K OHM 5% 1/6W
R508	61A 602-223-52T	22K OHM 5% 1/6W
R509	61A 602-823-52T	82KOHM +–5% 1/6W
R510	61A 602-333-52T	33K OHM 5% 1/6W
R511	61A 602-822-52T	8.2K OHM +–5% 1/6W
R512	61S 602-102-52T	1K OHM 5% 1/6W
R513	61A 602-103-52T	10K OHM 5% 1/6W
R514	61S 177-123-52T	12KOHM +–1% 1/4W
R515	61S 177-123-52T	12KOHM +–1% 1/4W
R516	61S 602-102-52T	1K OHM 5% 1/6W
R517	61S 602-471-52T	470OHM +–5% 1/6W
R518	61S 175-751-52T	750OHM +–5% 1/2W
R521	61S 175-510-52T	51OHM +–5% 1/2W
R524	61S 175-471-52T	470OHM +–5% 1/2W
R525	61S 175-331-52T	330 OHM +–5% 1/2W
R531	61A 602-103-52T	10K OHM 5% 1/6W
R532	61S 602-152-52T	1.5KOHM +–5% 1/6W
R534	61S 602-102-52T	1K OHM 5% 1/6W
R536	61S 602-105-52T	1MOHM 3–5% 1/6W
R551	61A 602-103-52T	10K OHM 5% 1/6W
R552	61A 602-103-52T	10K OHM 5% 1/6W
R553	61A 602-124-52T	120K OHM +–5% 1/6W
R554	61A 602-472-52T	4.7K OHM 5% 1/6W
R555	61A 602-823-52T	82KOHM +–5% 1/6W
R558	61S 172-103-52T	10K OHM 5% 1/4W
R560	61 177-133-52T	13K OHM 1% 1/4W
R562	61S 177-124-52T	120KOHM +–1% 1/4W
R564	61S 172-475-52T	4.7MOHM +–5% 1/4W
R566	61S 177-124-52T	120KOHM +–1% 1/4W
R567	61A 602-153-52T	15K OHM 5% 1/6W
R568	61S 172-475-52T	4.7MOHM +–5% 1/4W
R569	61S 177-124-52T	120KOHM +–1% 1/4W
R570	61S 177-134-52T	130KOHM +–1% 1/4W
R571	61A 602-153-52T	15K OHM 5% 1/6W
R572	61S 172-475-52T	4.7MOHM +–5% 1/4W
R577	61S 177-124-52T	120KOHM +–1% 1/4W
R581	61S 177-104-52T	100KOHM +–1% 1/4W
R582	61S 177-104-52T	100KOHM +–1% 1/4W
R583	61S 177-104-52T	100KOHM +–1% 1/4W
R587	61S 172-479-52T	4.7 OHM +–5% 1/4W
R588	61A 602-222-52T	2.2KOHM +–5% 1/6W
R589	61A 602-222-52T	2.2KOHM +–5% 1/6W
R590	61A 602-562-52T	5.6K OHM 5% 1/6W
R591	61A 602-682-52T	6.8K OHM 5% 1/6W
R592	61A 602-103-52T	10K OHM 5% 1/6W

APPL.	CM326-AI	SPECIFICATION
R593	61A 602-333-52T	33K OHM 5% 1/6W
R600	61S 172-331-52T	330 OHM 5% 1/4W
R601	61S 175-105-52T	1MOHM +–5% 1/2W
R610	61A 602-332-52T	3.3K OHM 5% 1/6W
R611	61A 602-332-52T	3.3K OHM 5% 1/6W
R612	61A 602-151-52T	150 OHM +–5% 1/6W
R613	61S 602-102-52T	1K OHM 5% 1/6W
R614	61A 602-202-52T	2K OHM 5% 1/6W
R615	61A 602-332-52T	3.3K OHM 5% 1/6W
R616	61A 602-332-52T	3.3K OHM 5% 1/6W
R617	61A 602-202-52T	2K OHM 5% 1/6W
R618	61S 602-122-52T	1.2KOHM +5% 1/6W
R619	61A 602-151-52T	150 OHM +–5% 1/6W
R623	61A 602-151-52T	150 OHM +–5% 1/6W
R624	61S 602-470-52T	47OHM +–5% 1/6W
R626	61S 172-100-52T	10OHM +–5%
R641	61A 602-103-52T	10K OHM 5% 1/6W
R642	61A 602-202-52T	2K OHM 5% 1/6W
R648	61A 602-202-52T	2K OHM 5% 1/6W
R649	61S 602-200-52T	20OHM +–5% 1/6W
R650	61S 602-152-52T	1.5KOHM +–5% 1/6W
R651	61A 602-331-52T	330 OHM 5% 1/6W
R652	61A 602-331-52T	330 OHM 5% 1/6W
R653	61S 602-102-52T	1K OHM 5% 1/6W
R654	61A 602-332-52T	3.3K OHM 5% 1/6W
R656	61S 172-330-52T	33 OHM +–5% 1/4W
R658	61S 175-479-52T	4.7 OHM 5% 1/2W
R659	61S 175-104-52T	100K OHM 5% 1/2W
R660	61S 175-474-52T	470K OHM 5% 1/2W
R664	61S 172-100-52T	10OHM +–5%
R667	61A 602-331-52T	330 OHM 5% 1/6W
R668	61S 602-470-52T	47OHM +–5% 1/6W
R671 ⚠	61S 172-202-52T	2K OHM 5% 1/4W
R672 ⚠	61S 172-100-52T	10OHM +–5% 1/4W
R673 ⚠	61S 602-152-52T	1.5KOHM +–5% 1/6W
R674 ⚠	61A 602-621-52T	620 OHM +–5% 1/6W
R675 ⚠	**61A 602-163-52T**	**16K OHM +–5% 1/6W**
R676 ⚠	**61A 602-242-52T**	**2.4KOHM +–5% 1/6W**
R677	61A 602-331-52T	330 OHM 5% 1/6W
R678	61A 602-202-52T	2K OHM 5% 1/6W
R679	61S 602-102-52T	1K OHM 5% 1/6W
R680	61A 602-331-52T	330 OHM 5% 1/6W
R681	61A 602-332-52T	3.3K OHM 5% 1/6W
R685	61A 602-103-52T	10K OHM 5% 1/6W
ZD2002	93C 39-91-52T	7.78-8.19V DIODE
ZD401	93D 39-68-52T	11.44-12.03V DIODE
ZD403	93 39-49-52T	3V ZENER DIODE
ZD551	93C 39-91-52T	7.78-8.19V DIODE
ZD650	93C 39-55-52T	30V +–5% ZENER DIODE
ZD670	93D 39-73-52T	ZENER DIODE
ZD671	93D 39-73-52T	ZENER DIODE

NOTE:
TEST CONDITION FH=31KHZ, FV=60HZ COLOR BAR



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Y-DY
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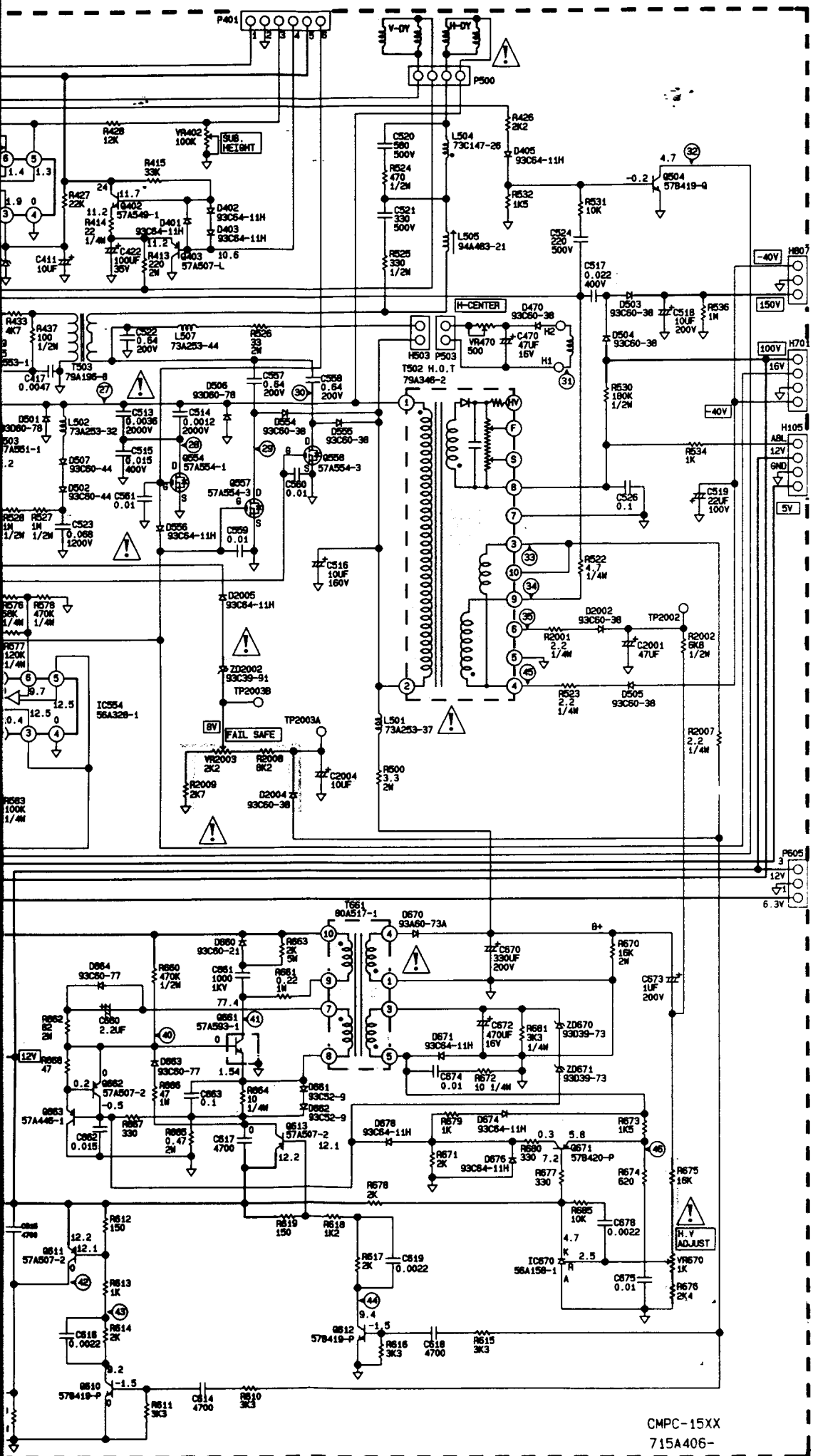
IC354 56A328-1
IC353 56A210-2
IC840 56A198-1
T501 79A167-228
T502 79A34
T503 79A196-8
T621 80A526-2
T661 80A517-1
T622 79A166-2
T623 79A166-2
L501 73A253-3
L502 73A253-32
L507 73A253-44
L640 73C259-3
L641 73C259-2
L642 73C259-2
L643 73C259-1
L644 73C259-1
PINCUSHION
PINCUSHION
V-LINE
SUB. HEIGHT
FREE RUNNING 31K
22K FREE RUNNING
PHASE 31K
PHASE 15K
PHASE 22K
FAIL SAFE
VIDDE ADJUST
100V
24V
12V
8V
5V


P401
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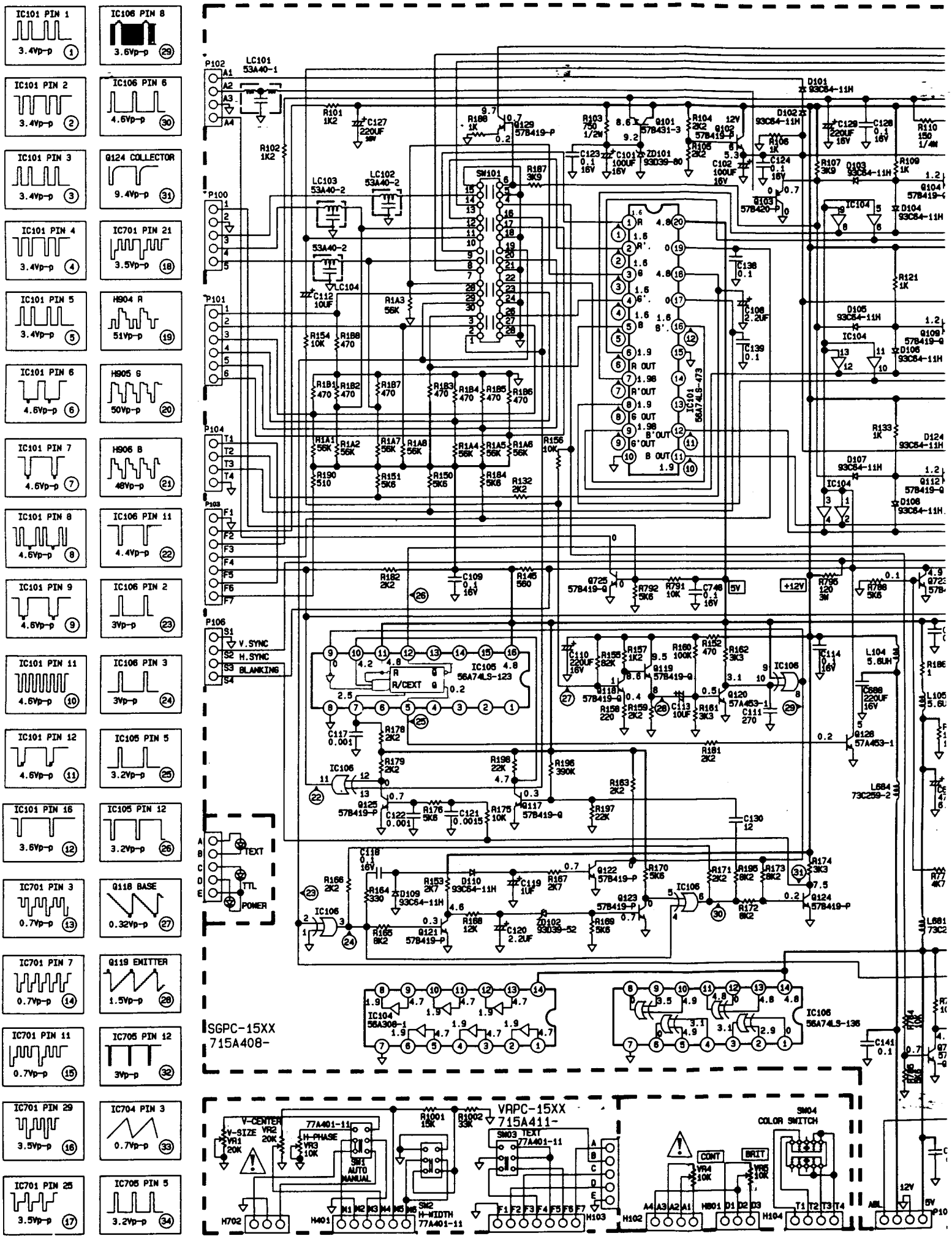
H-DY
P500
SUB. HEIGHT
H-CENTER
H503
P503
T502 H.O.T
79A346-2
T503
79A196-8
T661
80A517-1
FAIL SAFE
IC554
56A328-1
IC670
56A158-1
H.V ADJUST
-40V
150V
100V
16V
12V
GND
5V
6.3V
B+
H801
H701
H105
P605
CMPC-15XX
715A406-
PARTS NO: 41A31-011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IC101 PIN 2
3.4Vp-p (2)
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3.4Vp-p (3)
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IC101 PIN 5
3.4Vp-p (5)
IC101 PIN 6
4.6Vp-p (6)
IC101 PIN 7
4.6Vp-p (7)
IC101 PIN 8
4.6Vp-p (8)
IC101 PIN 9
4.6Vp-p (9)
IC101 PIN 11
4.6Vp-p (10)
IC101 PIN 12
4.6Vp-p (11)
IC101 PIN 16
3.6Vp-p (12)
IC701 PIN 3
0.7Vp-p (13)
IC701 PIN 7
0.7Vp-p (14)
IC701 PIN 11
0.7Vp-p (15)
IC701 PIN 29
3.5Vp-p (16)
IC701 PIN 25
3.5Vp-p (17)
IC106 PIN 8
3.6Vp-p (29)
IC106 PIN 6
4.6Vp-p (30)
Q124 COLLECTOR
9.4Vp-p (31)
IC701 PIN 21
3.5Vp-p (18)
H904 A
51Vp-p (19)
H905 G
50Vp-p (20)
H906 B
48Vp-p (21)
IC106 PIN 11
4.4Vp-p (22)
IC106 PIN 2
3Vp-p (23)
IC106 PIN 3
3Vp-p (24)
IC105 PIN 5
3.2Vp-p (25)
IC105 PIN 12
3.2Vp-p (26)
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0.32Vp-p (27)
Q119 EMITTER
1.5Vp-p (28)
IC705 PIN 12
3Vp-p (32)
IC704 PIN 3
0.7Vp-p (33)
IC705 PIN 5
3.2Vp-p (34)
SGPC-15XX
715A408-
VRPC-15XX
715A411-
V.SYNC
H.SYNC
BLANKING
TEXT
TTL
POWER
V-CENTER
V-SIZE
H-PHASE
H-WIDTH
COLOR SWITCH
CONT
BRIT
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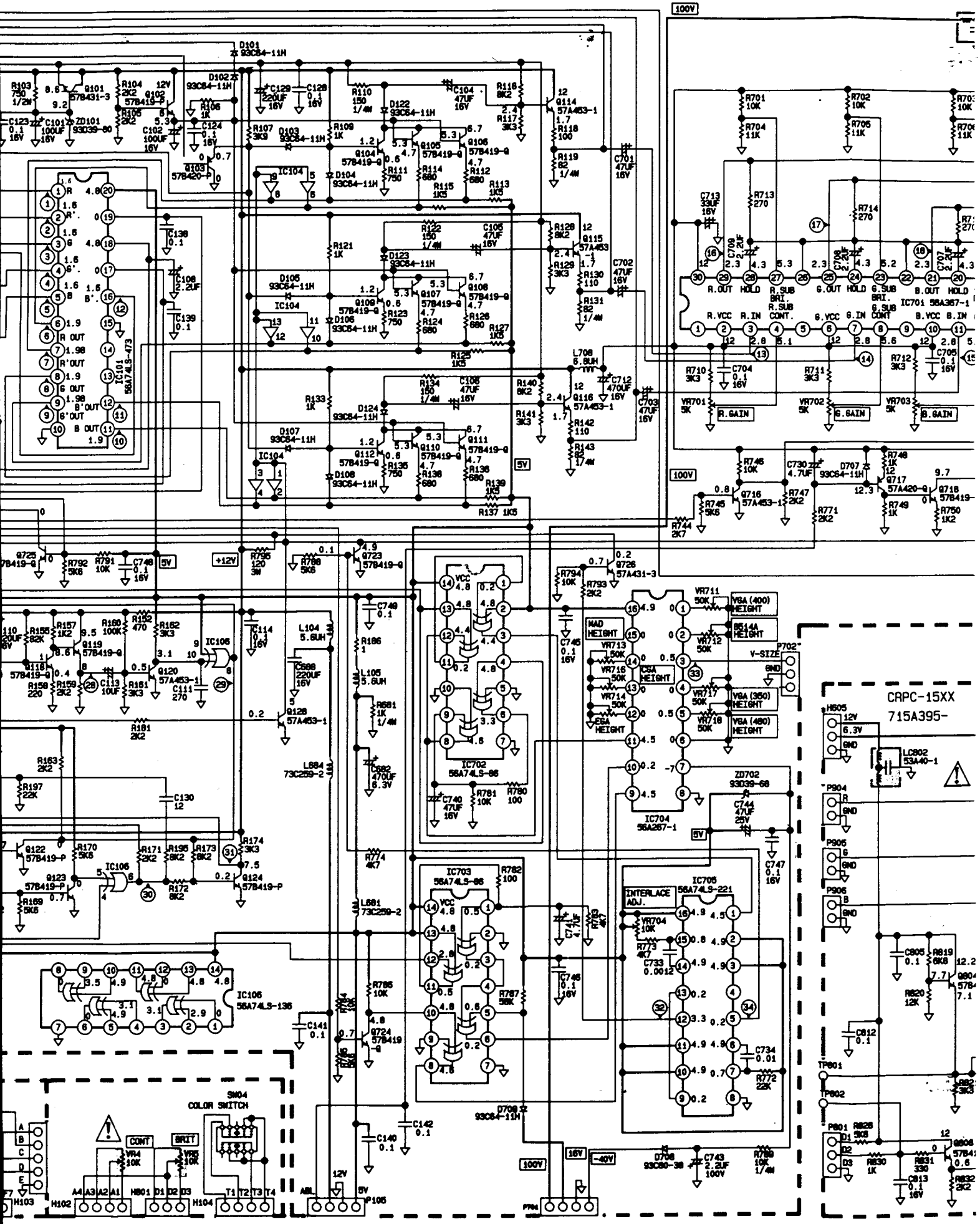
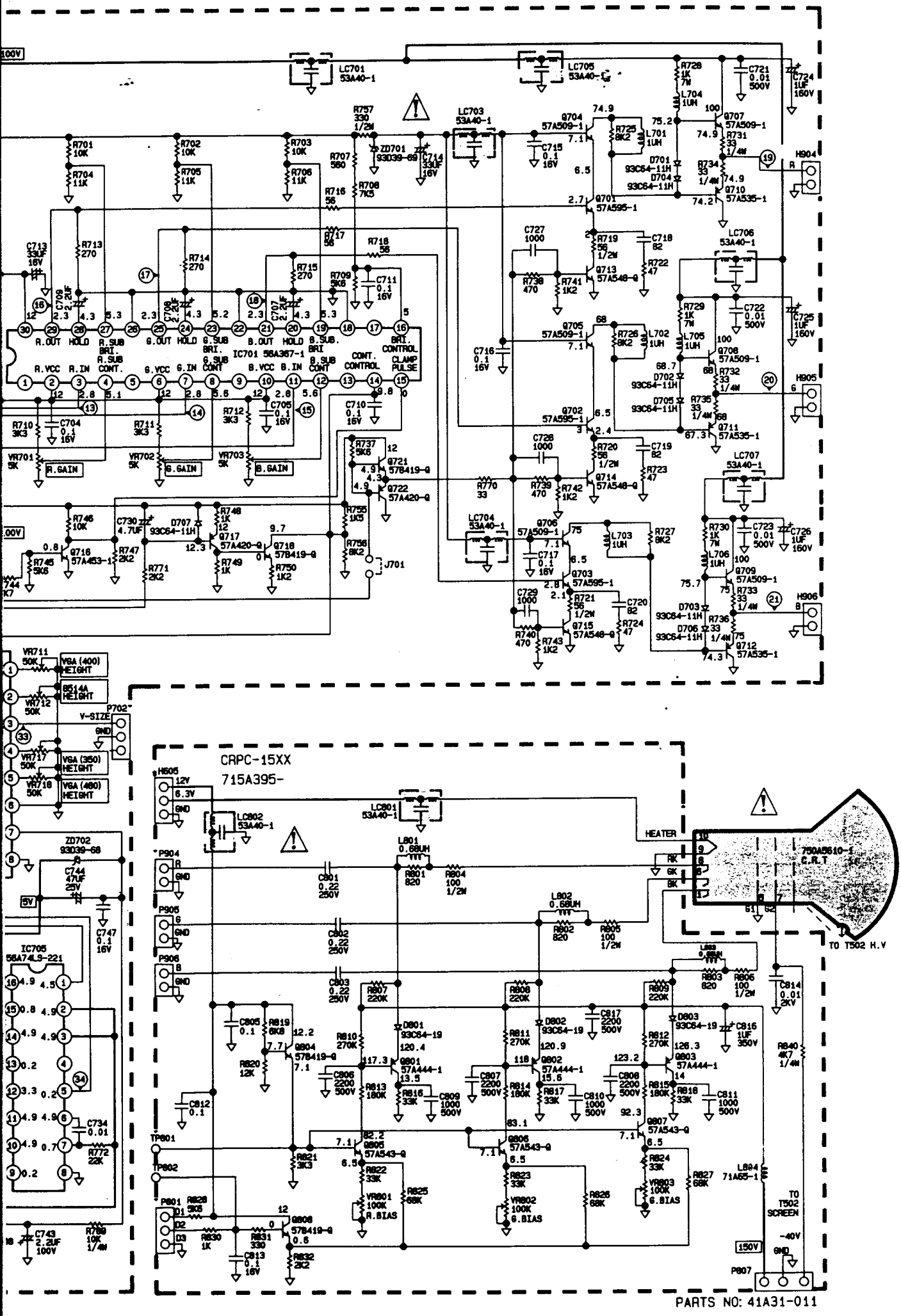
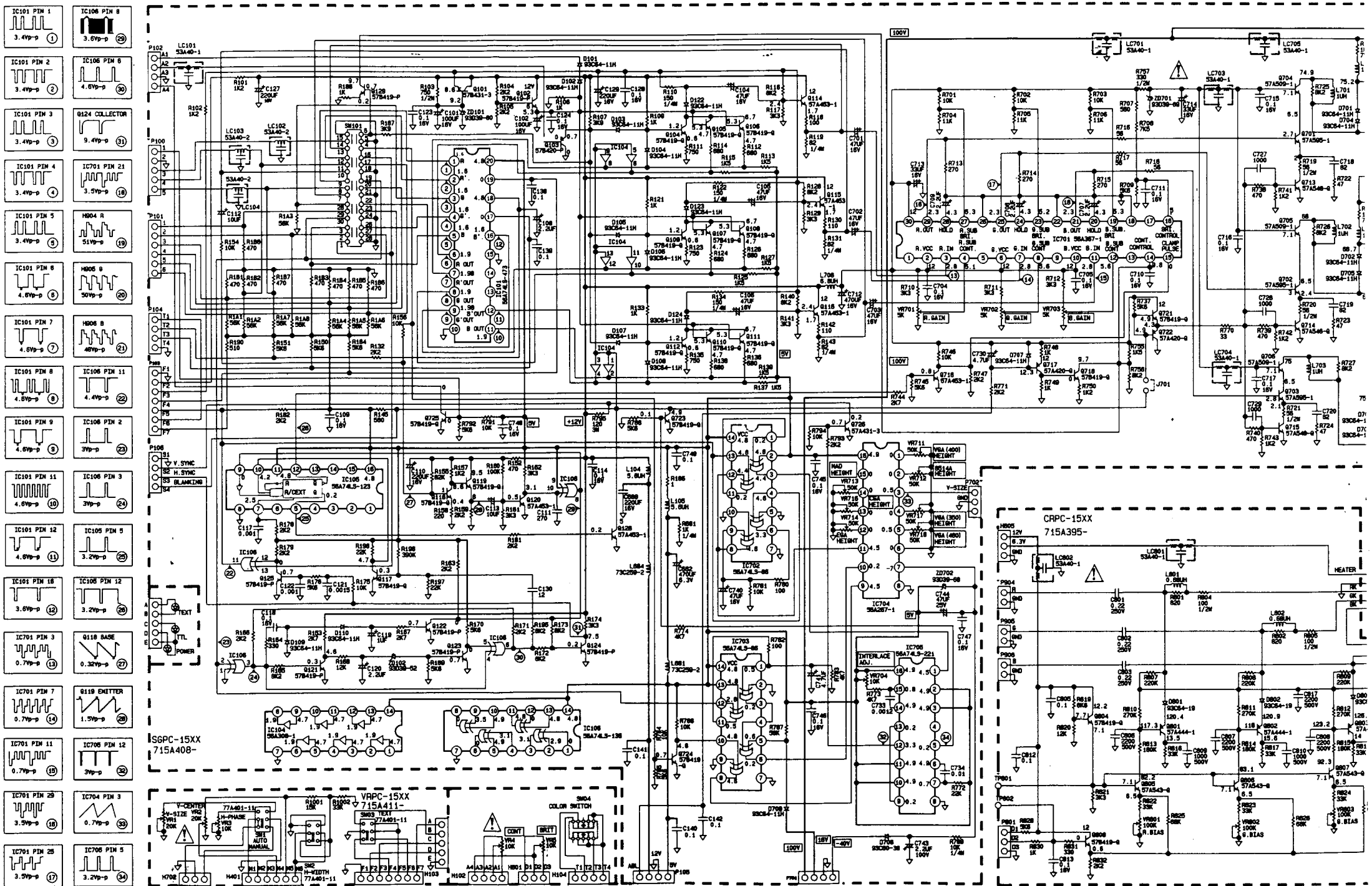
IC104 56A306-1
IC105 56A74LS-123
IC106 56A74LS-136


CRPC-15XX
715A395-
100V
5V
+12V
16V
-40V
12V
R.GAIN
G.GAIN
B.GAIN
V-SIZE
COLOR SWITCH
SW04
CONT
BRIT
IC101 56A74LS-473
IC104
IC106 56A74LS-136
IC702 56A74LS-86
IC703 56A74LS-86
IC704 56A267-1
IC705 56A74LS-221
IC701 56A367-1
R.VCC R.IN R.SUB BRI. CONT. G.VCC G.IN G.SUB BRI. CONT B.VCC B.IN
R.OUT HOLD R.SUB BRI. G.OUT HOLD G.SUB BRI. B.OUT HOLD
INTERLACE ADJ.
MAD HEIGHT
VGA (400) HEIGHT
8514A HEIGHT
CGA HEIGHT
EGA HEIGHT
VGA (350) HEIGHT
VGA (480) HEIGHT


CRPC-15XX
715A395-
PARTS NO: 41A31-011


IC101 PIN 1
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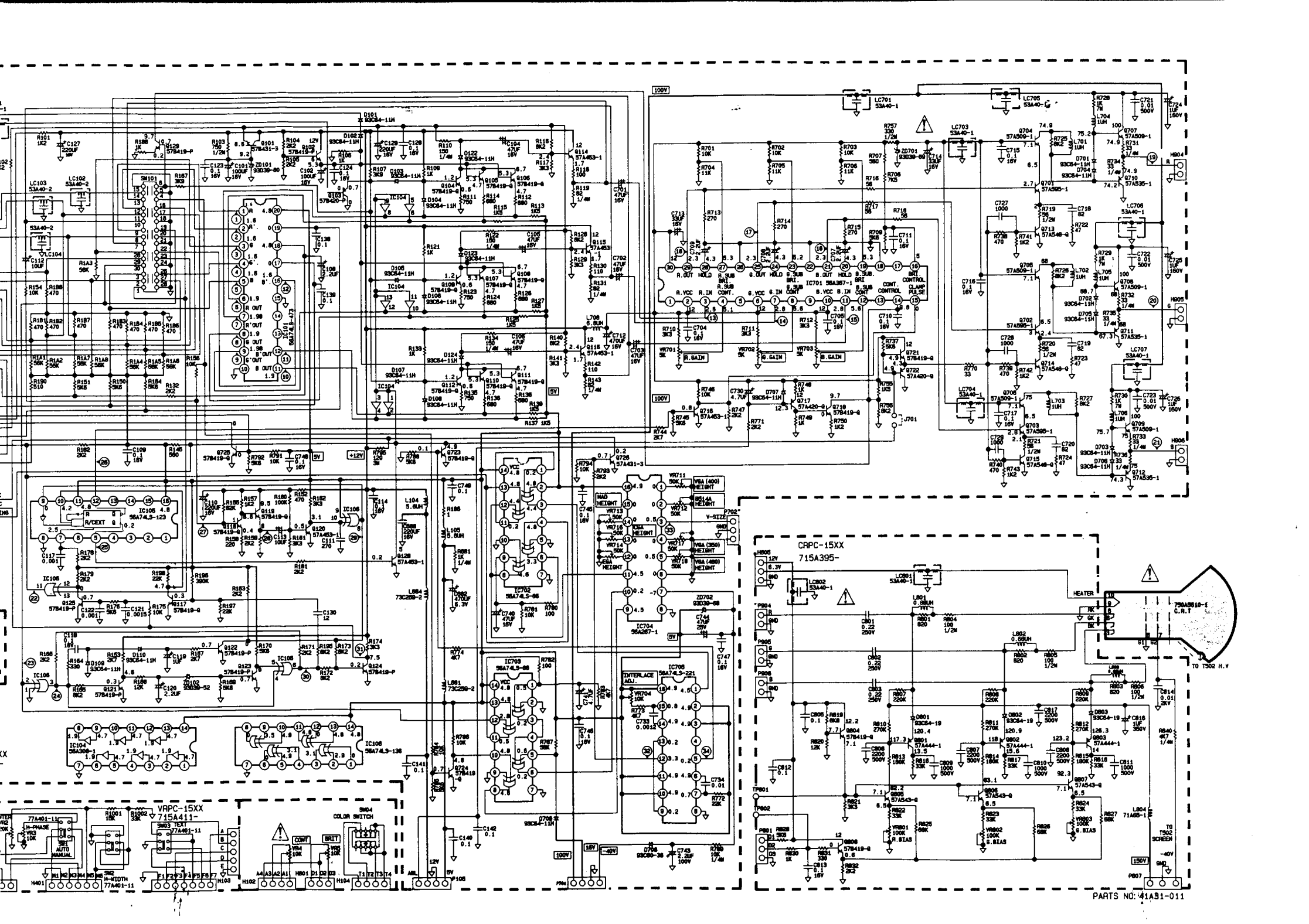
1
IC106 PIN 8
3.6Vp-p
29
IC101 PIN 2
3.4Vp-p
2
IC106 PIN 6
4.6Vp-p
30
IC101 PIN 3
3.4Vp-p
3
Q124 COLLECTOR
9.4Vp-p
31
IC101 PIN 4
3.4Vp-p
4
IC701 PIN 21
3.5Vp-p
18
IC101 PIN 5
3.4Vp-p
5
H904 A
51Vp-p
19
IC101 PIN 6
4.6Vp-p
6
H905 B
50Vp-p
20
IC101 PIN 7
4.6Vp-p
7
H906 B
48Vp-p
21
IC101 PIN 8
4.6Vp-p
8
IC106 PIN 11
4.4Vp-p
22
IC101 PIN 9
4.6Vp-p
9
IC106 PIN 2
3Vp-p
23
IC101 PIN 11
4.6Vp-p
10
IC106 PIN 3
3Vp-p
24
IC101 PIN 12
4.6Vp-p
11
IC105 PIN 5
3.2Vp-p
25
IC101 PIN 16
3.6Vp-p
12
IC106 PIN 12
3.2Vp-p
26
IC701 PIN 3
0.7Vp-p
13
Q118 BASE
0.32Vp-p
27
IC701 PIN 7
0.7Vp-p
14
Q119 EMITTER
1.5Vp-p
28
IC701 PIN 11
0.7Vp-p
15
IC706 PIN 12
3Vp-p
32
IC701 PIN 29
3.5Vp-p
16
IC704 PIN 3
0.7Vp-p
33
IC701 PIN 25
3.5Vp-p
17
IC706 PIN 5
3.2Vp-p
34
SGPC-15XX
715A408-
VRPC-15XX
715A411-
CRPC-15XX
715A395-
100V
5V
12V
-40V
16V
V-SIZE
H-PHASE
H-WIDTH
COLOR SWITCH
R.GAIN
G.GAIN
B.GAIN
HEATER


VAPC-15XX
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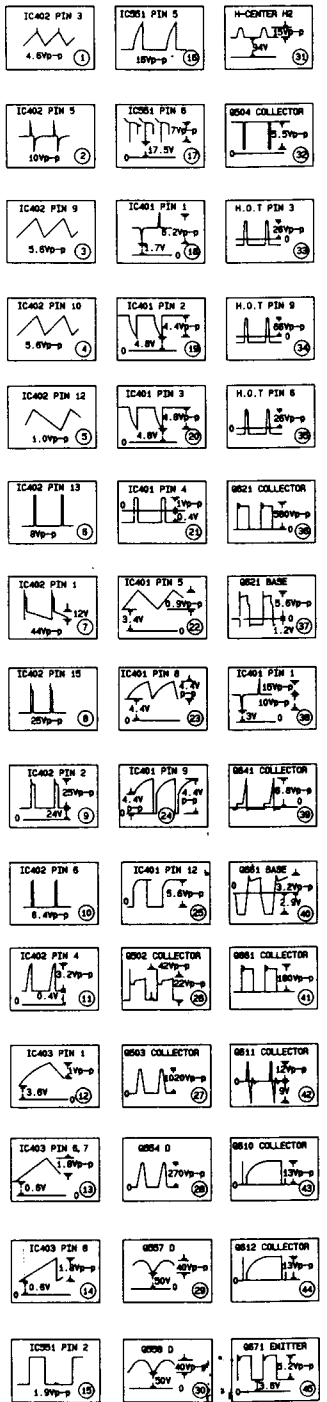
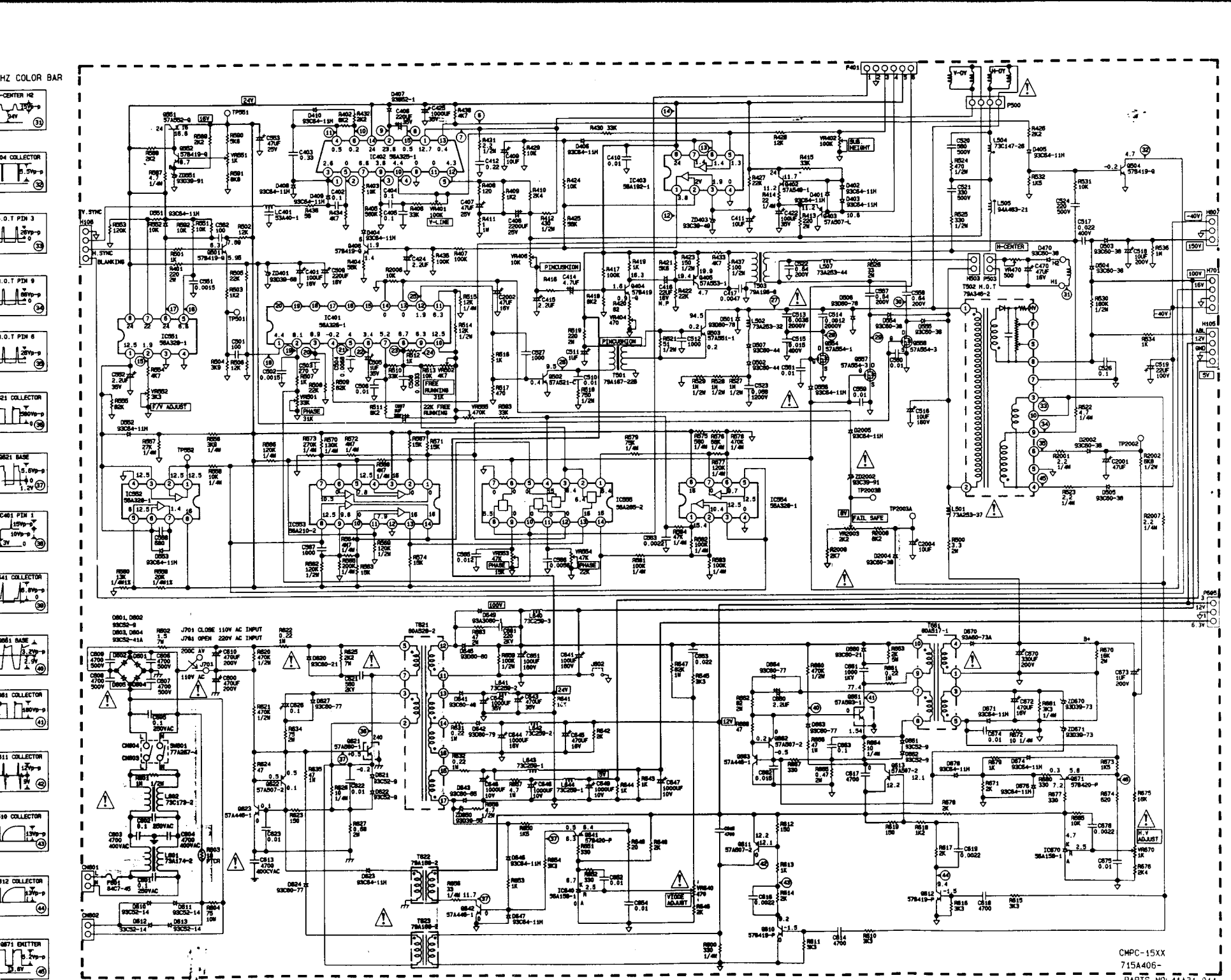
CRPC-15XX
715A395-
PARTS NO: 41A91-011

NOTE:
TEST CONDITION FH=31KHZ, FV=60HZ COLOR BAR




HZ COLOR BAR
CENTER H2
COLLECTOR
BASE
EMITTER
24V
16V
H.SYNC
BLANKING
V.SYNC
PINCUSHION
H-CENTER
V-LINE
SUB HEIGHT
H/V ADJUST
FREE RUNNING
PHASE
FAIL SAFE
100V
12V
5V
-40V
150V
H.V ADJUST
VIDEO ADJUST
CMPC-15XX
715A406-
PARTS NO: 41A31-011

THESE DOCUMENTS ARE FOR REPAIR SERVICE INFORMATION ONLY. EVERY REASONABLE EFFORT HAS BEEN MADE TO ENSURE THE ACCURACY OF THIS MANUAL; WE CANNOT GUARANTEE THE ACCURACY OF THIS INFORMATION AFTER THE DATE OF PUBLICATION AND DISCLAIMS LIABILITY FOR CHANGES, ERRORS, OR OMISSIONS.

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12. CIRCUIT DIAGRAM .....

1. SPECIFICATIONS

CRT	14" (13V) 90 Degree Deflection 0.28mm Dot Pitch.
INPUT SIGNAL	Video : TTL Level Positive : Analog 0.7Vp-p/75 ohm Positive Sync. : Separate Sync. TTl Level Horizontal Sync. Positive/Negative Vertical Sync. Positive/Negative : Composite Sync. TTL Level Positive/Negative : Composite Sync. On Green Video (Sync. 0.3Vp-p Negative. Video 0.6Vp-p Positive)
Display Colors	TTL Input : 8/16/64 Colors Analog Input : Unlimited Colors
Scanning Frequencies	Horizontal : 15KHz - 38KHz Automatically Vertical : 45KHz - 90KHz Automatically
Resolution	Horizontal : 800 Dots Vertical : 600 Lines
Pixel Rate	45MHz
Misconvergence	Center : 0.3mm Corner : 0.4mm
Power Source	AC 120VAC or 220VAC 50Hz/60Hz
Power Consumption	95W
Dimensions	372 (W) X 380 (H) X 385 (D)
Weight	13.5KGs (Net), 15.2KGs (Gross)
Environmental Consideration	Operation : Temperature 0° C to +40° C Humidity 30% to 80% Storage : Temperature -20° C to +60° C Humidity 10% to 90%

Note: The Above Specifications are Subject to Change Without Notice for Further Improvement.

2. PRECAUTIONS AND NOTICES

2–1 SAFETY PRECAUTIONS

1. Observe all safety related notes located inside the display cabinet.

2. Operation of the monitor with the cabinet or sources the cover removed involves a shock hazard from various power sources. Work on this unit should not be attempted by anyone who is not thoroughly familiar with precautions necessary when working on high voltage equipment.

3. Do not remove, install or handle the picture tube in any manner unless shatter-proof goggles are worn. People not so equipped should be kept away while handling picture tube. Keep picture tube away from the boby while handling.

4. The picture tube is constructed to limit X-RAY radiation to 0.5 mR/HR. For continued protection, use the recommended replacement tube only. Adjust power supply voltages so that the designated maximum voltage rating at the anode will not be exceeded.

5. Before returning unit to the customer, a thorough safety test must be performed to verify that the unit is safe to operate without danger of shock. Always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as screwheads. Test must be performed to verify that the unit is safe to operate without danger shock. Method for current leakage test is described as follows.

   (a) Plug the AC line cord directly into rated AC outlet (Note: Do not use a line isolation transformer during this check).

   (b) Use an AC voltmeter with 5000 ohms per volt or more sensitivity. Connect a 1500 ohms 10 WATT resistor, paralleled by a 0.15mfd, AC type capacitor between known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts simultaneously. Measure the AC voltage across the 1500 ohms resistor and 0.15mfd capacitor.

   (c) Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part.

   (d) Voltage measured must not exceed 0.5 volts RMS. This corresponds to 0.35 milliamp AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

2–2 PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have specific safety instruction. The protection afforded by them connot necessarily be obtained by using replacements. Before replacing any high voltage component. Be sure to read the parts list of this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics, as specified in the parts list, may create shock, fire X-RAY radiation or other hazards.

2–3 SERVICE NOTES

1. When replacing parts or circuit boards, clamp the lead wires around terminals before soldering.

2. When replacing a high wattage resistor (more than 1/2W), mount the resistor 10mm (1/2 in) above the circuit board.

3. Keep wires away from high voltage or high temperature components.

4. Keep wires in their original position so as to reduce interference.

2–4 HIGH VOLTAGE WARNING

Operation of the monitor outside of the cabinet or with back removed, involves a shock hazard. Repair on these models should only be performed by a qualified technician who is thoroughly familiar with precautions necessary when working on high voltage equipment.

Exercise care when servicing this chassis with power applied. Many B plus and high voltage terminals are exposed which, if carelessly contacted, can cause serious shock or result in damage to the chassis. Maintain inter-connecting ground lead connections between chassis and picture tube dag wire when operating chassis.

Certain HV failures can increase X-ray radiation. The monitor shoujld not be operated with HV levels exceeding the specified rating for their chassis type. The maximum operating HV specified for the chassis used in this monitor is

24K ± 1KV

with a line voltage of 120V AC. Higher voltage may also increase possibility of failure in HV supply.

It is important to maintain the specified values of all components in the horizontal, high voltage circuits, or anywhere else that could cause a rise in high voltage or operating supply voltages. No changes should be made to the original design of the monitor. Components shown in the shaded areas on the schematic should be replaced with exact factory replacement parts. The use of unauthorized substitute parts may create a shock, fire or other hazard.

To determine the presence of high voltage, use an accurate, high impedance, HV meter connected between second anode lead and CRT dag grounding device. When servicing the High Voltage circuit, remove the static charge by connecting a 10K ohm resistor in series with an insulated wire (such as a test probe) between picture tube dag and 2nd anode lead. (Note: The AC line cord should be disconnected from AC power outlet).

The CRT used in this monitor employs internal implosion protection. Replace with tube of the same type number for continued safety. Do not lift picture tube by the neck. Handle the CRT only after discharging the 2nd anode completely.

H.V. Protector

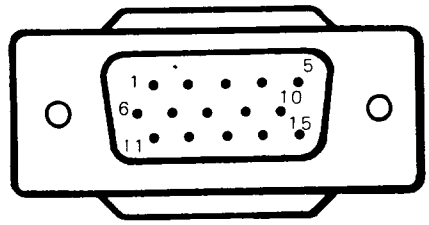
The high voltage adjustment control 2 (VR2003) is permanently sealed at factory.

Do not attempt to readjust.

3. INPUT SIGNAL TERMINAL

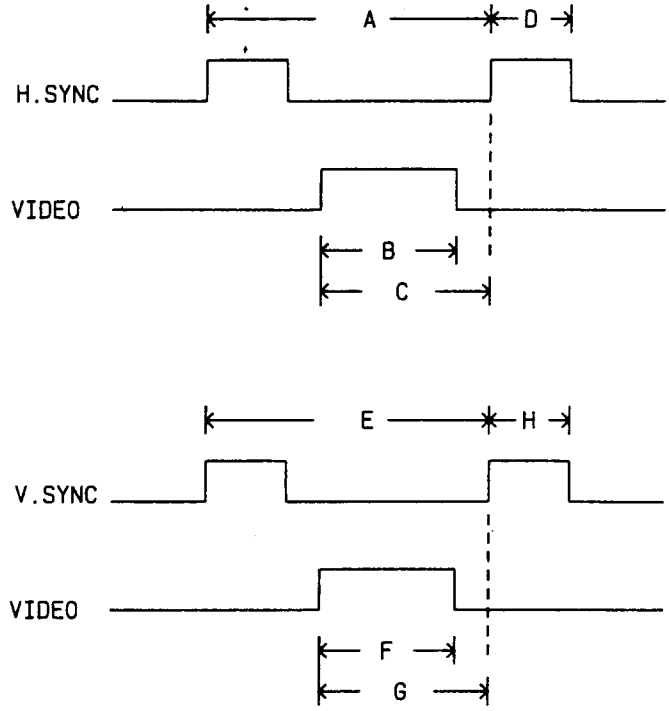
15 PIN D-SUB CONNECTOR

PIN ASSIGNMENTS



SIGNAL / PIN NO.	TTL				ANALOG		
	TEXT ON	8 COLORS	16 COLORS	64 COLORS	SEPARATE SYNC.	COMPOSITE SYNC.	SYNC. ON GREEN
1.	GND	GND	GND	GND	RED VIDEO	RED VIDEO	RED VIDEO
2.	—	—	—	R'	GREEN VIDEO	GREEN VIDEO	GREEN VIDEO WITH H/V SYNC.
3.	—	R	R	R	BLUE VIDEO	BLUE VIDEO	BLUE VIDEO
4.	—	—	—	—	GROUND	GROUND	GROUND
5.	V-SYNC.	V-SYNC.	V-SYNC.	V-SYNC.	GROUND	GROUND	GROUND
6.	INTENSITY VIDEO	—	INTENSITY VIDEO	G'	RED GROUND	RED GROUND	RED GROUND
7.	VIDEO	—	—	B'	GREEN GROUND	GREEN GROUND	GREEN GROUND
8.	H-SYNC.	H-SYNC.	H-SYNC.	H-SYNC.	BLUE GROUND	BLUE GROUND	BLUE GROUND
9.	—	—	—	—	NC.	NC.	NC.
10.	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND
11.	GND	GND	GND	GND	GROUND	GROUND	GROUND
12.	—	—	—	—	NC.	NC.	NC.
13.	—	G	G	G	H-SYNC.	H-SYNC.	H-SYNC
14.	—	B	B	B	V-SYNC.	V-SYNC.	V-SYNC.
15.	—	—	—	—	NC.	NC.	NC.

4. PRESET TIMING



H. SYNC A D VIDEO B C E H V-SYNC F G

A = Horizontal synchronization time
B = Display time
C = Horizontal synchronization delay time
D = Horizontal synchronization puls width
E = Vertical synchronization time
F = Display time
G = Vertical synchronization delay time
H = Vertical synchronization puls width